



2004 Archived Issues

JUNE

6-30-04 EPV NSF SBIR Award

EPV received a \$100K SBIR Phase 1 award for its proposal "An Efficient, Linear, Free Radical Source for Compound Film Deposition", effective 1 July 2004 through 31 December 2004. Successful demonstration in Phase 1 could lead to a Phase 2 effort to apply the source in the preparation of active CIGS devices and to scale up and evaluate the source in a large-area setting. EPV Press at: http://www.epv.net/news/news.htm

6-30-04 DayStar Coverage of New York Move

DayStar's press coverage of their move to New York can be found at: http://www.daystartech.com/press062104.htm

6-30-04 ISET CIGS PV SBIR Award

\ISET was awarded an MDA SBIR Phase 1 contract award for development of Thin Film CIGS PV arrays on lightweight and flexible ceramic substrates. ISET press: http://www.isetinc.com/news.html SBIR Awards (see ISET): http://www.dodsbir.net/selections/abs041/mdaabs041.htm

6-30-04 Thin-film PV Encapsulant Research

Cornerstone Research Group was selected for an MDA SBIR award for a proposal to develop and evaluate a novel encapsulation coating that protects thin-film PV cells on a high altitude airship. See Cornerstone at: http://www.dodsbir.net/selections/abs041/mdaabs041.htm

6-30-04 Triton Systems CIGS PV SBIR Award

Triton Systems, Inc. was selected for an MDA SBIR award for a proposal to demonstrate the feasibility of developing high-efficiency CIGS solar cells employing a proprietary method to produce a high-temperature capable, lightweight substrate(s) suitable for monolithic integration. See Triton at: http://www.dodsbir.net/selections/abs041/mdaabs041.htm

6-30-04 Blue Photonics Multijunction PV SBIR Award

Blue Photonics, Inc. was selected for an MDA SBIR award for a proposal to explore the feasibility of using InGaN allow materials to form individual subcells in a multijunction solar cell. Lawrence Berkeley National Laboratories will provide expertise on the compounds. See Blue Photonics at: http://www.dodsbir.net/selections/abs041/mdaabs041.htm

6-30-04 More on Heliovolt CIGS PV SBIR Award

Heliovolt Corp. was selected for an MDA SBIR award for a proposal to demonstrate the feasibility of their FASST (tm) process for Airship applications using their CIGS model. See Heliovolt at: http://www.dodsbir.net/selections/abs041/mdaabs041.htm

6-30-04 California, Renewable Hydrogen Roadshow

Stuart Energy's Renewable Energy Roadshow will appear 1-5 July at the Marin County Fair, with one of the components being the Renewable Stuart Energy Station, a water electrolysis-based hydrogen

station. Solar Integrated Technologies will display their solar canopy that will power performances on the Eco-Dome stage. The canopy will also fuel the SES system. More on the Show at:

http://biz.yahoo.com/prnews/040630/law021 1.html

Stuart Energy: http://www.stuartenergy.com/

Marin Fair: http://www.marinfair.org/

See also "Hydrogen from Electrolysis" at SolarAccess: http://www.solaraccess.com/news/story?storyid=6964

6-30-04 Solar Jobs in Canada

Two hundred jobs will be created by the end of next year at Canada's solar cell manufacturing plant. This and more renewables news at ReFocus:

http://www.sparksdata.co.uk/refocus/fp_showdoc.asp?docid=14289493&accnum=1&topics=Coverage of Canadian solar plant at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6987

See also EERE Network News, "Innovative Solar Manufacturing Plant Opens in Canada" [Kevin Eber] at:

 $\underline{\text{http://www.eere.energy.gov/news/archive.cfm/pubDate=\%7Bd\%20\%272004\%2D30\%27\%7D\#6961}$

6-30-04 World Energy Use

BP's report on world energy use is reviewed in ReFocus at:

http://www.sparksdata.co.uk/refocus/fp_showdoc.asp?docid=35883731&accnum=1&topics=According to the coverage, BP sells 71 MW a year of solar panels.

6-30-04 More on Arizona Public Service PV Incentives

APS plans to extend their EPS Credit Purchase Program, which provides incentives to APS customers. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=7013
APS: http://www.aps.com/my_community/Solar/eps.html

6-30-04 More on Solar for the Army

Additional coverage of solar technology for the Army from Iowa Thin Film Technologies, Konarka Technologies, and others, can be found at:

http://www.wired.com/news/technology/0,1282,64021,00.html?tw=wn_tophead_1

6-30-04 Renewable Energy Finance Forum

Coverage of activities at the Renewable Energy Finance Forum in New York, cosponsored by ACORE and Euromoney Institutional Investor, can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=7015

ACORE: http://www.americanrenewables.org/ Euromoney: http://www.euromoney.com/

6-30-04 National, European Solar Prizes

Organizations and businesses that have shown outstanding service to the utilization of solar energy are eligible for the 2004 EUROSOLAR awards. For more information, see SolarAccess:

http://www.solaraccess.com/news/story?storyid=7017

EUROSOLAR: http://www.eurosolar.org/new/index.shtml

6-30-04 Homeland Energy [Chuck Feinberg]

Homeland Energy Resource Development, Inc. announced that Nick Stecky and Jim Rogers have recently joined the company as Senior Consultants. Said John Fox, President, "We are proud to have such highly talented and regarded professionals as Nick and Jim working with us. Their technical abilities and professional experience will serve our clients well and enable Homeland Energy to further develop business in the New York and New Jersey region." [Email press release cfeinberg@homeland-energy.com] Homeland Energy: http://www.homeland-energy.com/

6-30-04 Sharp Special Report

Sharp's Environmental Report 2004 includes a special report on the "Decentralized Solar Power Project" in the village of Noyon in Mongolia. See page 7 of the report at: http://sharp-world.com/corporate/eco/report2004/

6-30-04 U.S., FY 2005 Energy Appropriations

The Senate Energy and Water Appropriations Subcommittee mark-up may be next week.

6-29-04 Solarforce Silicon Ribbon Process

Solarforce plans to start production of 150 micron thin wafers using an innovative crystalline silicon ribbon technology next year. See Photon International, June 2004 at: http://www.photon-magazine.com/news/news 2004-06 eu feat Solarforce.htm

6-29-04 AstroPower's Spanish Unit

AstroPower Inc. will auction its Spanish unit July 9 under a court ruling in the Chapter 11 case. Elecnor SA was approved as the opening bidder for the planed auction under an order signed by the Bankruptcy Chief Judge. More information through Solarbuzz at:

http://news.morningstar.com/news/DJ/M06/D28/200406281200DOWJONESDJONLINE000533.html

6-29-04 Module Test Laboratory

6-29-04 Our Solar Future [Holly Thomas, Susan DeVico]

Find the National Public Radio show Living on Earth, Our Solar Future at: http://www.loe.org/
Transcript:

6-29-04 PV Activities in Japan [Osamu Ikki]

The Ministry of Economy, Trade and Industry (METI) announced the "Long-term Energy Supply and Demand Outlook for 2030", with 4 scenarios, and "the strategy for creating new industry". Details by subscription at RTS Corporation, email: ikki@rts-pv.com.

6-29-04 Xantrex European Team

Xantrex Technology has appointed Jim Harre as the new managing director for Europe and Africa. And, Xantrex has established a new Projects Business Team, led internationally by Bernd Kohlstruck, with Andreas Vondung as the project director in Europe. Xantrex is now entering the European market with 2 new inverters. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUCO130.htm Xantrex: http://www.xantrex.com/

6-29-04 California, Open Hand Manufacturing Solar [Susan DeVico]

Open Hand Manufacturing, Inc., is dedicating a 68-kW solar electric system today at its manufacturing facility in Oakland. Mayor Jerry Brown is officiating at the dedication of the system, installed by PowerLight and comprising 360 modules. PowerLight press:

http://www.powerlight.com/company/press-releases/2004/06-28-04-OpenHand.shtml

6-29-04 California, Harley-Davidson Solar

Santa Barbara Harley-Davidson will have a 75-panel, 3,000 square foot, 37.5-kW solar electric system on the roof of their dealership, installed by Solar Electrical Systems of Westlake Village. Story at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=1724274&ResultCategoryType=2,7&NewsPageID=3

6-29-04 California, Vintage House Solar

Sonoma's Vintage House senior center joined with Solar Works to install a 32.5-kW PV system to supply nearly 40% of the center's electricity needs. The system covers the House's roof with 240 BP Solar 160-W modules. Story through Solarbuzz at:

http://www.sonomanews.com/articles/2004/06/28/news/business/business03.txt

Solar Works: http://www.solarworksca.com/

6-29-04 India Renewables

A 1-day conference of state Power Ministers in New Delhi June 28 was to focus on power generation capacity addition through grid-interactive renewable power projects, conversion of the on-going remote village electrification programme into a village energy programme, accelerated use of renewable energy in urban areas and industrial and commercial establishments, and creation of awareness of renewable technologies. Story at:

http://www.navhindtimes.com/stories.php?part=news&Story ID=062920

6-29-04 U.S., FY 2005 Energy Appropriations

The Senate Energy and Water Appropriations Subcommittee mark-up may be next week.

In related news....

6-29-04 BEF-Vision Quest Green Tags [Bill Jeppesen]

The Bonneville Environmental Foundation announced it has agreed to purchase a renewable energy product from Vision Quest, Canada, in the form of "Green Tags", which represents the environmental benefits of renewable energy generation and is a marketable product that businesses and individuals can use to offset harmful impacts associated with their electricity use. The Green Tags product allows the purchase of renewable energy to cross state, provincial and national borders. Bonneville Environmental Foundation: http://www.B-E-F.org/

Vision Quest: http://www.visionguestwind.com/index.asp

6-28-04 PV Overview

"Photovoltaic Cells: Power at a Price" and "Power from the Sun". For an overview of PV cells, including activities at a number of research centers such as Georgia Tech, see two articles in Chemical & Engineering News at: http://pubs.acs.org/cen/coverstory/8225/8225solarenergy1.html

6-28-04 General Electric in Germany

General Electric officially opened its new European Global Research Center in Garching near Munich. By 2005, the new center will have 150 scientists and engineers conducting research in 4 main areas: alternative energy generation, particularly hydrogen, biomass and fuel cells; electrical systems for renewable energy sources such as solar, wind and water; specialized sensors; and advanced medical imaging. Story at: http://biz.yahoo.com/bw/040628/285444 1.html

GE Press: http://www.ge.com/cgi-bin/cnn-

storydisplay_nu.cgi?story=/www/bw/webbox/bw.062804/241804997.htm&strip=1¬imestamp=1&noeditor=1&nohrule=1&header=%2Fwww%2Fbw%2Fge%2Ftest-

top.htm&footer=%2Fwww%2Fbw%2Fge%2Ftest-

bot.htm&textcolor=%23000000&bgcolor=%23FFFFFF&linkcolor=%230000FF&vlinkcolor=%23551A8B

6-28-04 SunTechnics Project

SunTechnics Solartechnik GmbH will soon complete the first 4-MW section of a 7.4-MW solar array project at the site of a former coal mine in Gottelborn, southern Germany. The PV arrays will cover the equivalent size of about 20 soccer fields, with 23,500 PV modules connected with 16 central 250-kW

inverters. The entire project is expected to be completed in August 2005. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPR162.htm

SunTechnics: http://www.suntechnics.de/

6-28-04 More on Western Governors Association Resolution

A working group will be formed to determine how to reach the energy goal of 30,000 MW of clean energy by 2015 and a 20% improvement in energy efficiency by 2020, and ensure the region has the necessary generation and transmission capacity. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6999

6-28-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Appropriations: The full House passed the EWD Appropriations bill H.R. 4614 on June 25. See House Appropriations Committee report H.R. 108-554, with renewables on pages 85 forward. Partial text: "The total Committee recommendation for solar energy in fiscal year 2005 is \$82,733,000, an increase of \$2,400,000 over the budget request. The Committee believes that the Department continues to underfund Concentrating Solar Power (CSP) technologies despite recent analyses documenting the potential of these technologies. The additional funds are provided to conduct CSP research at a level comparable to fiscal year 2004. The Committee directs Solar Heating and Lighting subprogram to be equally split between the Heating and Lighting research areas."

6-28-04 WWK Metrology Analysis Module

Wright Williams & Kelly, Inc. announced it will unveil the next generation of its Cost of Ownership and Overall Equipment Efficiency software, TWO COOL(R) (TWO COOL® is a registered trademark of Wright Williams & Kelly, Inc.) v.3.1 at SEMICON West San Francisco, 12-14 July. Information at: http://biz.yahoo.com/bw/040628/285313 1.html

WWK: http://www.wwk.com/

6-28-04 Solar Hydrogen

Funding of C\$522,000 from the Canadian government will allow the University of Victoria to purchase equipment for testing fuel cells and storing solar- or wind-generated hydrogen. This and more renewables news at ReFocus News-in-Brief at:

http://www.sparksdata.co.uk/refocus/fp_showdoc.asp?docid=63599795&accnum=1&topics=

In related news...

6-28-04 Solar / Gas Power Plant

One of the developers of the 740-MW High Desert project in Southern California is planning a \$365-million, 500-MW hybrid gas/solar project for a joint powers authority formed by the cities of Victorville and San Marcos. The project would include a 450-MW gas-fired, combined-cycle plant and a 50-MW parabolic trough solar thermal plant at the Southern California Logistics Airport in Victorville. The solar plant would use the next generation parabolic trough technology used as the Kramer Junction Solar Energy Generating Stations. Story at:

http://www.platts.com/Magazines/POWER/Power%20News/2004/061704 5.xml

6-28-04 Nevada Power's Renewables - Solargenix Project

Project leaders are hoping to wrap up financing by August for the EI Dorado Solar Generation Station in Clark County to be built by Solargenix. The project will see delays from its expected March 2005 online date, but the Western area manager for Solargenix is optimistic about the financing. Story at: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=53228507&ID=cnniw&scategory=Energy%3AAlternative&

6-25-04 Printable Solar Cells

See the article on "Solar-Cell Rollout" by Peter Fairley, July/August 2004 at the MIT Technology Review: http://www.technologyreview.com/articles/fairley0704.asp

6-25-04 Shell Solar Modules

Shell Solar GmbH launched a new range of solar electric modules called Shell PowerMax(tm) (PowerMaxTM is a trademark of the Shell Solar GmbH) at the Intersolar tradeshow in Freiburg. Shell PowerMax(tm) (PowerMaxTM is a trademark of the Shell Solar GmbH) Ultra is based on monocrystalline silicon. Shell PowerMax(tm) (PowerMaxTM is a trademark of the Shell Solar GmbH) Plus is based on multi-crystalline silicon. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPT22.htm

Shell Press:

http://www.shell.com/home/Framework?siteId=shellsolar&FC2=/shellsolar/html/iwgen/news_and_library/press_releases/2004/zzz_lhn.html&FC3=/shellsolar/html/iwgen/news_and_library/press_releases/2004/powermax_2406.html

6-25-04 Engency Portfolio of Residential Customers [Anthony Scott Jones]

Engency Inc. has completed the final phase of its first portfolio of residential solar customers. One hundred California residential customers will be presented in a turnkey package to the solar manufacturer wishing to gain instant market share. Customers are pre-sold and aligned with all financing options. The portfolio customers will purchase a standardized solar PV kit. [Engency Press, asj@veritaslp.com]

Engency: http://www.engency.com/

6-25-04 BP Solar in Government Programme

The U.K. Government recently announced its latest £2 million funding programme to add 620 kWp of solar power throughout the U.K., and BP Solar is involved in half of the initiatives. BP Press at: http://www.bpsolar.com/DisplayNews.cfm?id=93

6-25-04 Rhode Island Clean Energy

The General Assembly passed a bill - the Clean Energy Act - that would increase the amount of green power to 16% by 2020. The bill requires that at least 3% of retail electricity sales in the state come from renewable resources in 2007, increasing after that. Stories at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=53109854&ID=cnniw&scategory=Energy %3AAlternative& and SolarAccess: http://www.solaraccess.com/news/story?storyid=6998

6-25-04 Colorado Renewable Energy Conference

Colorado's largest renewable energy meeting starts today in Denver. The 2004 Colorado Renewable Energy Conference will be at the University of Denver through Sunday. Story in today's Daily Camera at: http://www.dailycamera.com/bdc/state_news/article/0,1713,BDC_2419_2989627,00.html

6-25-04 India, BHEL Solar Power Plant

Bharat Heavy Electricals Ltd has commissioned the country's largest stand-alone solar power plant at Mousuni Island in West Bengal. The 105-kW plant was commissioned in association with West Bengal Renewable Energy Development Agency. Story at:

http://sify.com/finance/equity/fullstory.php?id=13505493

Coverage also at Solarbuzz: http://www.solarbuzz.com/News/NewsASPR117.htm

BHEL: http://66.39.99.160/bhel/

6-25-04 Thailand Electricity Interest in Solar Company

Ratchaburi Electricity Generating Holding is interested in taking a 20% stake in Solatron Co., which recently won a 1.4-billion-baht contract from the Provincial Electricity Authority. Story at: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story id=53051082&ID=cnniw&scategory=Energy %3AAlternative&

6-25-04 California, Solar Project to Reduce Carbon Emissions

PV has been installed on carports and on the roof of a water district building in Santa Clara County as part of a \$2.4M project sponsored by the U.S. EPA and the Santa Clara Valley water district to reduce carbon dioxide emissions. Fat Spaniel Technologies will monitor the water district's solar energy system with their PV2Web solar monitoring solution. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6992

6-25-04 California, Solar Homes

The California Assembly Housing Committee passed a bill that would establish a minimum standard for builders to install PV systems on 15% of new single-family homes beginning in 2006, increasing to 55% by 2010. Stories at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO185.htm and SolarAccess: http://www.solaraccess.com/news/story?storyid=6995

6-25-04 More on DayStar Move

DayStar said in late March it was moving its expanding operations to Golden, Colorado; however, incentives took them to New York. More on this move at:

http://pei.pennwellnet.com/articles/article_display.cfm?Section=ONART&Category=INDUS&PUBLICA_TION_ID=6&ARTICLE_ID=207055

http://www.sacbee.com/content/business/story/9763763p-10686537c.html

6-25-04 Clean Energy: Solar Photovoltaics (Amy Cole)

Information on "Clean Energy: Solar Photovoltaics", a report from Research and Markets, can be found at: http://www.researchandmarkets.com/reports/c2419/

Also, information on their Renewables Manufacturers Directory can be found at: http://www.researchandmarkets.com/reports/c2409/

6-25-04 Canada, Renewable Energy Responses

Ninety companies expressed interest in producing renewable energy for Ontario totaling 4,400 MW - 15 times the amount asked for, said Minister Dwight Duncan. "The response to this call has been no less than astounding". Story at:

 $\frac{\text{http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article } {\text{e\&cid=1088072440337\&call pageid=968332188492\&col=968705899037}} \\$

6-25-04 PerfectPower New CEO

PerfectPower Inc. has hired Lynn Paige as their new CEO. Said President John Balfour, "We launched PerfectPower about four years ago, and our growth has been overwhelming. We had modest success on the internet and spent the past two years shifting our emphasis to large development projects." Lynn Paige was recruited, with skills to create the management team and supporting organization to handle growth and rapid change. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO226.htm

PerfectPower: http://www.perfectpower.net/

6-25-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Appropriations, full House consideration today.

6-25-04 U.S., Energy Tax Policy

H.R. 4520, the House corporate tax bill with wind & biomass tax credits passed June 17, House Report 108-548. S. 1637, the Senate corporate tax bill (JOBS) with a \$19-billion package of energy tax incentives passed May 11, Senate report 108-192. Negotiators will now have to resolve differences before full House and Senate votes on a compromise, followed by the President's action.

6-24-04 PV Distribution Partnership

SunTechnics and SunPower Corporation announced a distribution partnership at the Intersolar 2004

tradeshow. The agreement gives SunTechnics exclusive rights to market \$40 million to \$75 million of select SunPower PV products in Europe through 2005. SunTechnics' two new modules feature SunPower's all-black appearance and all-back-contact solar cells that have conversion efficiencies of more than 20%. Story at: http://biz.yahoo.com/bw/040624/245140 1.html

SunTechnics: http://www.SunTechnics.de/
SunPower: http://www.sunpowercorp.com/html/

6-24-04 Renewable Hydrogen Generation

The Chewonki Foundation of Wiscasset has teamed up with the Hydrogen Energy Center of Portland to create the Chewonki Renewable Hydrogen Project, an educational demonstration. As part of the \$250,000 project, a PV system will be installed on the roof of the Chewonki's Center for Environmental Education to produce hydrogen from water with the PV-powered electrolyzer. The hydrogen will be stored, and fed into fuel cells for back-up power. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6984

Chewonki: http://www.chewonki.org/Home/ Hydrogen Energy Center: http://www.h2eco.org/

6-24-04 PV Inverter Line

Magnetek, Inc. announced that its line of Aurora PV inverters will be formally unveiled at the Intersolar 2004 trade show in Freiburg, Germany 24-26 June 2004. Information at:

http://biz.yahoo.com/bw/040624/245211 1.html Magnetek: http://www.alternative-energies.com/

6-24-04 More on ATS PV Plant

ATS has begun to optimize the 26 individual production processes that are housed in the new PV factory, and Spheral Solar Power is expected to begin shipping products this summer. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6987

ATS Automation: http://www.atsautomation.com/

Spheral Solar: http://www.solaraccess.com/marketplace/compdetail?compid=1816

6-24-04 More on Konarka Venture Capital

Proceeds from Konarka's \$18M Series C financing will be used for capital equipment, operational expenses, and strategic investments associated with scaling manufacturing to production levels, as well as supporting R&D. New Enterprise Associates invested \$3.6M in Konarka. Said Arno Penzias, NEA venture partner, "While today's wide interest in new sources of energy has spawned a swarm of photovoltaic start-ups, only Konarka offers the cost advantage of roll-to-roll manufacturing, with the installation conveniences associated with integration into roofing materials." Story at:

Additional coverage at: http://news.com.com/Start-up+promises+bendy+solar+cells/2110-7341_3-5245520.html?part=rss&tag=5245520&subj=news.7341.10

6-24-04 Fraunhofer Publications

Publications from the Fraunhofer Institut Solare Energiesysteme, presented at the 19th EPVSEC, can be accessed under publications at: http://www.ise.fraunhofer.de/english/publications/index.html

6-24-04 European Commission Internet Broadcast

The European Commission is launching its first streaming portal on renewable energies and energy efficiency, with interactive live Internet broadcasts and video on demand. Story at:

http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/780&format=HTML&aged=0&language=en&guiLanguage=en

 $\underline{\text{http://www.managenergy.tv/me portal/portal.do;jsessionid=5A2CBAC9A8B9D45CFF727902923CF2D}}\underline{\textbf{E}}$

6-24-04 IEA PV Power Systems Programme Special Issue [Kevin Eber]

Issue No. 19, 23 June 2004, a special issue on the IEA Photovoltaic Power Systems Programme, is on line at: http://spider.iea.org/impagr/cip/archived_bulletins/index.htm

6-24-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Appropriations, full House consideration June 25.

The House Appropriations Committee passed its FY 2005 Agriculture spending bill yesterday, which includes provisions for renewable energy grants and loans at about \$15M (\$23M in FY 2004).

6-24-04 Solar Boat Event

Solar Cup, the solar-powered boat competition sponsored by the Metropolitan Water District of Southern California, is featured on an upcoming edition of the cable TV program "Straight Talk With Art Levine". Held 21-23 May, Solar Cup drew 22 teams from high schools throughout the Southland. Students built, equipped, and raced solar-powered boats. Story at: http://biz.yahoo.com/bw/040623/235795 1.html

6-23-04 ATS PV Production Facility

A 20 MW production facility for solar photovoltaics is opening to manufacture a flexible solar cell with tiny silicon beads bonded in an aluminum foil. The [Canadian] federal government provided \$30 million of the total \$85 million to commercialize the product. This and more news at the Canadian Association for Renewable Energies http://www.renewables.ca/main/main.php Story at: http://www.stockhouse.com/news/news.asp?tick=ATA&newsid=2342401 Additional company information at: http://www.atsautomation.com/profile/news/pr2004.asp

6-23-04 Konarka Venture Capital

Konarka Technologies has \$18 million in a 3rd round of financing as it prepares a production line for its lightweight, flexible solar cells. It expects to deliver its first commercial products by December. Konarka uses a process called "cold sintering" that it says allows it to produce PV cells at 1/3 the temperature of traditional methods. Story at:

http://boston.bizjournals.com/boston/stories/2004/06/21/daily21.html?jst=b In hl Konarka Press: http://www.konarkatech.com/news_press.php

6-23-04 Thailand Solar

Solatron Co. Ltd. plans to list on the Stock Exchange of Thailand by the end of the year. The move to list is part of the company's strategy to support its future business expansion. The company currently can produce 40 MW annually, and expects to increase capacity to around 80 MW after its expansion. Story at:

http://www.nasdaq.com/asp/quotes_news.asp?cpath=20040623%5CACQDJON200406230551DOWJONESDJONLINE000272.htm&selected=9999&StoryTargetFrame=_top&mkt=WORLD&chk=uncheckedlang=&link=&headlinereturnpage=http://www.international.nasdaq.com/asp/gmWorldNews.asp&headl

6-23-04 Industry Growth Forum [Linda Floyd]

The 17th NREL Industry Growth Forum will be held 18-20 October 2004 in Orlando, Florida. The forum will showcase about 35 promising clean energy companies poised for market growth. NREL is accepting applications from clean energy companies who would like to present to an audience of leading clean-energy investors. For more information, see the Web site at: http://www.incubator.com/nrel/apply.shtml

6-23-04 DOE Federal Energy Management Technical Assistance [Shawn Herrera]

The U.S. DOE FEMP is interested in supporting agency projects in need of technical assistance in several areas, including renewable energy. The total value for FY 2005 technical assistance is up to

\$500,000 to be distributed among selected projects, typically ranging from \$25,000 to \$50,000 per project. Those interested in requesting technical assistance from FEMP can submit an on-line application at: http://fempcentral.com/tacalls/logon.ta

Additional information at: http://www.eere.energy.gov/femp/

6-23-04 Crystalline Silicon Solar Cells and Modules Workshop (Sandy Padilla)

The "14th Workshop on Crystalline Silicon Solar Cells & Modules: Materials and Processes" will be held August 8-11, 2004 in Winter Park, Colorado, USA. The workshop is intended to address the fundamental properties of PV-Si, new solar cell designs, and advanced solar cell processing techniques. For more information, or to register, visit the website at:

http://www.nrel.gov/silicon_workshop/ or contact Dr. Bhushan Sopori at: bhushan_sopori@nrel.gov or Sandy Padilla@nrel.gov or Sara Huntley at sara_huntley@nrel.gov

6-23-04 Space Power

Scientists from around the world will gather June 30 to July 2 in Spain to discuss solar power from space. The conference will include scientists from NASA, the European Space Agency, and the Japan Aerospace Exploration Agency. More on this topic at:

http://www.wired.com/news/technology/0,1282,63913,00.html?tw=wn_tophead_1

SPS Conference Website: http://www.congrex.nl/04c15/

6-23-04 Western Governors Association

Policy Resolutions adopted at the 2004 WGA Annual meeting include Clean Energy (04-14) http://www.westgov.org/wga/policy/04/. According to the WGA Website, the Western Governors discussed energy supplies and set ambitious goals for development of renewable energy sources and improved energy efficiency (6/22/04) http://www.westgov.org/. The Governors want to develop 30,000 MW of clean energy in the West by 2015 and increase energy efficiency 20% by 2020. Governor Bill Owens was elected chairman of the group. Coverage from numerous sources, such as:

http://www.rockymountainnews.com/drmn/business/article/0,1299,DRMN 4 2983126,00.html

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=17214 61&ResultCategoryType=2,7&NewsPageID=3

http://www.azdailysun.com/non_sec/nav_includes/story.cfm?storyID=89469

http://www.dailycamera.com/bdc/state_news/article/0,1713,BDC_2419_2983580,00.html

6-23-04 Solar and Wind Powered Stadium [Kevin Eber, EERE Network News]

New York City is bidding to host the 2012 Summer Olympics, and is including a renewable-powered stadium as part of its bid. The plan includes 25,000 solar collectors for hot water, 100,000 square feet of PV panels, and 34 wind turbines. Story at EERE Network News:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D06%2D23%27%7D#6946> Plan and video:

http://www.nyconventioncorridor.org/

6-23-04 U.K., Solar Pyramid

The Solar Pyramid, due to be completed in a year, will be the world's largest solar-driven timepiece, with a 150-foot mirror-polished stainless steel structure. According to the article, the Solar Pyramid incorporates new and innovative solar cell technology. As well as providing a major tourist attraction, it is hoped the pyramid will become a center of excellence for solar science. Once complete, it will not only be the nation's biggest art landmark, but a fully working precisely-accurate sundial. Story June 22 at:

http://www.sheffieldtoday.net/Results.aspx?Search=Solar+Pyramid&SearchType=any&SearchSection =58&DateFrom=011995&DateTo=062004&Page=1

Solar Pyramid: http://www.solarpyramid.co.uk/

6-23-04 Solar Panel Shortage

California solar firms are finding PV panels hard to come by and the shortage is expected to last until

the European winter makes it difficult to install units on German rooftops. Story at: http://www.californiaenergycircuit.net/displaystory.php?task=show&sid=506&un=&ut=&pd=&seid=108 7998037

6-23-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Appropriations, full House consideration this week.

In related news...

6-23-04 New Mexico, Concentrating Solar Power RFP

The State of New Mexico, through the New Mexico Energy, Minerals and Natural Resources Department is requesting proposals to perform a feasibility study to define and scope a specific, viable utility-scale project or projects using concentrating solar power technology in New Mexico. About \$190,000 is available. More information at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6974

EMNRD RFP Information: http://www.emnrd.state.nm.us/ecmd/

6-22-04 New Mexico, Solar-panel Plant [Joel Goldblatt]

Governor Bill Richardson announced that the village of Questa, New Mexico will become home to a Spire Solar, Inc. facility that will manufacture solar panels. Scroll to story and photo at: http://www.taosnews.com/db/Daily.php3#150.

An article was also published in the Albuquerque Journal June 18 (subscription required: "Solar-Panel Firm Plans Plant, 20 Jobs in Questa" http://www.abqjournal.com/north/187583north news06-18-04.htm)

6-22-04 Solar Metal Roofing Product

AluPlusSolar combines UNI-SOLAR thin-film PV laminate and Kalzip sanding seam roofing for a flexible solar metal roofing solution. Said Director of Engineering at solarcentury, Dan Davies, "This product is the result of 2 years hard work and AluPlusSolar is another example of how PV can be used as a standard construction material to form part of a building." Malcolm Ball, solarcentury Commercial Director said, "...we've already secured funding for 2 AluPlusSolar projects in the latest round of DTI funding." Solarcentury secured 6 projects in the latest round of founding by DTI. Press at: http://www.solarcentury.co.uk/news/newsitem.jsp?newsid=385 and http://www.solarcentury.co.uk/news/newsitem.jsp?newsid=387

6-22-04 Uni-Solar Ovonic BIPV in Beijing

United Solar Ovonic announced the signing of a new contract to provide a 300-PV system for the Beijing New Capital Museum scheduled to open in 2005. Uni-Solar's flexible PV laminates will be applied directly to the stainless steel roofing pans using the "peel and apply" adhesive. Story at: http://biz.yahoo.com/prnews/040622/detu008 2.html

Uni-Solar: http://www.uni-solar.com/

6-22-04 Evergreen Solar Private Equity Financing

Evergreen Solar, Inc., announced the completion of its previously announced private placement financing of \$20M of Common Stock and warrants to purchase Common Stock. Press at Evergreen: http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=eslr&script=410&layout=-6&item_id=583735

6-22-04 Marc Roper, RWE SCHOTT Solar [Bill Jeppesen]

RWE SCHOTT Solar Inc. announced the promotion of Marc Roper to vice president of sales and marketing. In addition to overseeing the company's sales operations, Marc will be responsible for developing and implementing the company's strategic marketing initiatives in the North and South American markets. [Press release]

RWE SCHOTT Solar: http://www.rweschottsolar.com/

Photo:

 $\frac{\text{http://www.rweschottsolar.com/cms/us/files/2004/4/632168736497500000jmxdsk55jil4mz45pc51hnmu}{.JPG}$

6-22-04 More on ECN Publications - Screen-printed Silicon Solar Cells, and Dye-sensitized Solar Cells (Mariska van Rijn-Brak)

Two papers published by ECN at the 19th EPVSEC, one on producing 16.5% screen-printed silicon solar cells with low-cost inline processing, and another on new concepts and materials for dye-sensitized solar cells, are now available on line at: http://www.ecn.nl/zon/epvsecparis20042.html

6-22-04 California, Emerging Renewables Program

6-22-04 More on DayStar Move

DayStar Technologies will relocate the company from Grass Valley, California to Saratoga County, New York. More on this story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6968

6-22-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Appropriations, full House consideration this week.

6-21-04 DayStar Move

DayStar Technologies, Inc. announced it has elected to relocate the Company from Grass Valley, California to Saratoga County, New York where it will establish its corporate headquarters, manufacturing plant and research and development facilities. The New York State Department of Economic Development has provided a package of State and local economic incentives valued up to \$11,136,000. Story at: http://biz.yahoo.com/prnews/040621/nym056 1.html
More news at:

http://www.timesunion.com/AspStories/story.asp?storyID=258946&category=BUSINESS&newsdate=6/19/2004

6-21-04 Germany, Q-Cells Production Expansion

Q-Cells AG plans to open a 4th production line in 2005. Production expectations have also increased from 60 MW to 75 MW in 2004. The expanded plant will produce what the company says is an industry-leading 210 mm dimensioned multicrystalline silicon solar cell with 15% efficiency. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUMA44.htm

Q-Cells: http://www.q-cells.com/1 eng.php

6-21-04 Germany, 4-MW PV Installation

BP Solar is building one of the largest PV installations in the world near Merseburg in southern Saxonia-Anhalt. The PV plant will produce about 3.4 M kWh per year. There's an option to extend the plant size by another 2 MW later. A total of about 25,000 mono-crystalline and polycrystalline solar modules manufactured by BP Solar make up the plant. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPR160.htm

BP Solar: http://www.deutschebp.de/genericsection.do?categoryld=370&contentId=2000104

6-21-04 European Renewable Energy Loans

The European Investment Bank will increase its lending for renewables by up to 50% of its financing for electricity generation in the EU by 2010 in order to promote the EU's target of 22% from green power, according to a 6-point renewable energies action plan outlined at the recent renewables conference in Bonn. This story, and more renewables news, at ReFocus:

http://www.sparksdata.co.uk/refocus/redesign/fp_showdoc.asp?docid=42475528&accnum=1&topics=

6-21-04 Arizona, APS PV Program

Arizona Public Service made public plans to extend their EPS Credit Purchase Program. The program provides incentives to APS customers that install PV power systems on their properties. The first phase of funding for the program was completely reserved by the end of May. The extension provides an additional \$1M in funding and brings the total funding available for PV systems to \$2M in 2004.

Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO181.htm

EPS Credit Purchase Program: http://www.aps.com/my_community/Solar/eps.html%20

Arizona SEIA: http://www.arizonasolarindustry.org/

6-21-04 Solar Electric Systems for Uganda Telecom

NAPS Systems OY will deliver 22 solar electricity systems to Siemens for Uganda Telecom's cellular network extension project. The delivery comprises 1,216 pieces of 100-W solar modules, 22 heavyduty charge controllers, and battery banks. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsAFPR13.htm NAPS Systems: http://www.napssystems.com/

6-21-04 PV System Monitoring

Santa Clara Valley Water District has selected Fat Spaniel Technologies to monitor the water district's new \$2.4M solar energy system. Fat Spaniel Technologies is a provider of real-time solar energy monitoring for commercial and residential installers, equipment manufacturers, and systems owners via any internet-enabled device. The public will also be able to view the data real-time. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR392.htm

Water District: http://www.valleywater.org/

Fat Spaniel Technologies: http://www.fatspaniel.com/

6-21-04 California PV Program

In an email from the California Solar Energy Industries Association, Executive Director Jan McFarland requested that solar proponents immediately contact CPUC Commissioners to push for changes in the California Self-Generation program, in order to facilitate growth. See details at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO179.htm

California SEIA: http://www.calseia.org/

6-21-04 Australia, CSIRO Agenda

CSIRO has a substantial program in place that includes research into topics such as solar reforming of natural gas to "embed" solar energy in gas and consequently reduce greenhouse gas emissions, production of hydrogen from renewables, and renewables generation, among others, with the ultimate objective to develop technologies that will lead to "Zero Emissions Technologies" for energy use in Australia. Story at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=1719664&ResultCategoryType=2,7&NewsPageID=3

6-21-04 Japan, Clean Energy Policy

Japan plans to strengthen its industrial sector by developing clean energy using solar power, wind, and biomass, or organic, resources. The Ministry of Economy, Trade and Industry finalized its policy after concluding it was necessary to enhance the marketability of clean energy rather than depending on subsidizing domestic industry. A system will be established to network solar and wind power generators with biomass energy generators and fuel cells. Story at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=17194 67&ResultCategoryType=2,7&NewsPageID=3

6-21-04 Solar 2004 MSRI and IREC Meeting

The Million Solar Roofs Initiative and the Interstate Renewable Energy Council will hold their annual meeting at the Solar 2004 Conference in Portland, Oregon, on July 10. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6957

Million Solar Roofs: http://millionsolarroofs.com/articles/static/1/1083875008 1023713684.html

IREC: http://irecusa.org/

6-21-04 "Power from the Sun", Cover Story

A cover story in Chemical & Engineering News, "Power from the Sun", with PV facts, figures, and commentary from PV Energy Systems' Paul Maycock, and Worldwatch Researcher Janet Swain, can be found at: http://pubs.acs.org/cen/coverstory/8225/8225solarenergy.html

6-21-04 Interview with Jeremy Leggett

For an interview with Jeremy Leggett, CEO of Solar Century, including information on solar roof tiles, see story through SolarAccess at:

http://www.guardian.co.uk/economicdispatch/story/0,12498,1242186,00.html

6-21-04 More on the Sharp-New Mexico MOU

Said Ron Kennedi, General Manager of Sharp Electronics' Solar Systems Division, "Sharp is proud to work with the state of New Mexico, which shares our keep commitment to make solar a mainstream energy alternative. Amid increasing energy costs and environmental concerns, the clean, renewable energy provided by solar technology holds significant promise for the future. With the accumulated knowledge and experience of Sharp and this impressive team of collaborators, this major partnership aims to pave the way for expanded solar energy markets and cleaner, more environmentally-friendly energy sources." Story at: http://biz.yahoo.com/bw/040618/185313 1.html
Sharp: http://www.sharpusa.com/SharpHome/

6-21-04 Nextek's New Tool [Mark Robinson]

Nextek Power Systems has a new tool to illustrate the methods behind and benefits of their Solar-Assisted, Grid-Backed, lighting and backup lighting systems. See the flash movie at: http://www.DirectCoupling.com/ Nextek: http://www.DirectCoupling.com/ Nextek: http://www.NextekPower.com/

6-21-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Committee mark-up June 16: The Committee recommends \$82,733,000 for the solar energy programs in FY 2005. See House Report 108-554. Full House consideration June 23 or 25.

Interior & Related Agencies Bill: June 17, the House passed the Interior and Related Agencies Appropriations bill, which includes Energy Conservation at \$656,071,000. Vehicle technology research \$167.356M; fuel cell research \$71M; intergovernmental activities \$84.667M; distributed energy resources \$62.48M; building technologies \$64.884M; industrial technologies \$84.94M; biomass and biorefinery systems \$12.68M; Federal Energy Management Program \$17.9M; program management \$90.164M. Weatherization eamarking is recommended at \$227.3M and State energy earmarking at \$44.798M. The Senate has not marked up yet.

U.S. Department of Energy National Center for Photovoltaics

6-18-04 AstroPower Action

AstroPower Inc. is seeking court permission to sell its Spanish unit in a Chapter 11 auction. The company said it has agreed to sell all of its equity interest in the unit to Spanish concern Elecnor SA pending court approval. If the sale is approved, AstroPower plans to close the deal in the 3rd quarter. The Spanish unit is AstroPower's last major asset to be sold. Story through Solarbuzz at: http://news.morningstar.com/news/DJ/M06/D17/200406171128DOWJONESDJONLINE000657.html

6-18-04 Q-Cells Facts

For selected facts and figures on installed capacity, production, number of employees, and revenue as of summer 2004, see: http://www.q-cells.com/7 eng.php

6-18-04 SMUD Partners

The Sacramento Municipal Utility District is inviting potential suppliers of renewable electricity to add their names to SMUD's solicitation email list. Those on the list will soon receive a Request for Offer to help SMUD identify potential renewable energy projects to help meet its Renewable Portfolio Standard goals and Greenenergy program requirements. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6945

SMUD Bids: http://www.bids.smud.org/

6-18-04 SolarOne Solar-powered LED Lights [A. Karina Felix] SolarOne(tm) (SolarOneTM is a trademark of SolarOne Solutions--parent company is Systems Design and Technology) Solutions announced the first of several new outdoor lights for neighborhoods, campuses, and parks. The lights are powered by a solar cell array, and produce light from an array of white LEDs. Press at: http://www.solarone.net/news/docs/pr040616.html

6-18-04 Prep Course for PV Installer Certification (IREC)

On 9 July 2004, a preparatory course for the NABCEP PV Installer Certification Exam will be held in Portland, Oregon. For this and more news, see the Interstate Renewable Energy Council eNewsletter at: http://www.irecusa.org/commout/enewsletter.html

For registration information: http://www.ases.org/solar2004/s04 main.htm

6-18-04 U.S., State Incentives (IREC)

Visit the new incentives, and updated/verified incentives at the Database of State Incentives for Renewable Energy (DSIRE) for the latest on state incentives at: http://www.dsireusa.org/

6-18-04 U.S., Energy Tax Provisions

The House approved a corporate tax bill, H.R. 4520, that includes a 2-year extension of a renewable energy production tax credit (wind, closed-loop biomass). The Senate earlier passed a corporate tax bill that included a \$19-billion package of energy tax incentives. Now the bills will go into negotiations.

6-18-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Committee mark-up June 16: The Committee recommends \$82,733,000 for the solar energy programs in FY 2005.

Interior & Related Agencies Bill: Last night the House passed the Interior and Related Agencies Appropriations bill, which includes Energy Conservation. Vehicle technology research \$167M; fuel cell research \$71M; building technologies \$65M. The Senate has not marked up yet.

6-17-04 Iowa Thin Film Solar Tents

lowa Thin Film Technologies, Inc. has completed development of integrated solar technology for 3 Army tent prototypes. The tents integrate the company's POWERFILM(R) (PowerFilm® is a registered trademark of lowa Thin Film Technologies) flexible solar panels directly with the tent fabric. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT78.htm Iowa Thin Film Technologies: http://www.iowathinfilm.com/

6-17-04 Evergreen Solar Private Placement

Evergreen Solar, Inc. announced it has agreed to sell approximately \$20 million of equity in a private placement of Common Stock and warrants to purchase Common Stock. Said Richard M. Feldt, President and Chief Executive Officer, "The \$20 million we are raising puts Evergreen in the strongest financial position in its history and gives it the resources it needs to execute the business plan". Press at: http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=eslr&script=410&layout=-6&item_id=582242

6-17-04 Entech Articles

Three articles recently published by CompoundSemiconductor.net and Optics.org related to Entech's ground and space technologies are featured at: http://www.entechsolar.com/

6-17-04 Sharp & New Mexico

More on the agreement between Sharp and New Mexico can be found at the Sharp press: http://sharp-world.com/corporate/news/040616.html

CNN Yellowbrix:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=52708932&ID=cnniw&scategory=Energy %3AAlternative&

Richardson Press: http://www.governor.state.nm.us/2004/news/june.html

6-17-04 Bonn Renewables Conference

For an overview of key policy recommendations to promote renewables from the conference in Bonn, Germany, see ReFocus at:

http://www.sparksdata.co.uk/refocus/redesign/fp_showdoc.asp?docid=54848880&accnum=1&topics=

6-17-04 SEMICON Europa 2005 (Wolfgang Koch)

The SEMI Technology Symposium of SEMICON Europa 2005 will be held 12-14 April 2005 in Munich. SEMI is transforming the SEMICON(R) (SEMICON® is a registered trademark of Semiconductor Equipment and Materials International [SEMI]) Europa exposition and conferences into a European forum matched to the challenges facing the European semiconductor industry. SEMI invites materials and equipment manufacturers of the PV community and their suppliers to become actively involved in shaping of both a Photovoltaic Production Technology Session during the Symposium, and a dedicated exhibition to showcase PV competence. [press and flyer at the 19th PVSEC, Paris]

Laura Jäth: ljaeth@semi.org

Johanna Turpeinen: jturpeinen@semi.org

Fred Kolbe: fkolbe@semi.org

6-16-04 Sharp with New Mexico

Sharp Corp. and the U.S. State of New Mexico will work together to develop new energy systems, including some for solar power generation and fuel cells. Under the plan, New Mexico will arrange for Sharp to collaborate with research institutes and universities in the state, including Los Alamos National Laboratory, Sandia National Laboratories, and New Mexico State University. Story at: http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=17031 06&ResultCategoryType=2,7&NewsPageID=3

6-16-04 WorldWater PV Delivery

WorldWater Corp. announced it has completed supplying the 1-MW PV system at Cerro Coso Community College in Ridgecrest, California. The company delivered over 6,000 Sharp Electronics solar modules, as well as the inverters and required distribution equipment. Story at: http://biz.yahoo.com/pz/040616/59213.html

WorldWater: http://www.worldwater.com/

6-16-04 Manufacturing Simulation Software

Wright Williams & Kelly, Inc. announced it has shipped its latest version of TWO COOL(r) (TWO COOL® is a registered trademark of Wright Williams & Kelly, Inc.) Cost of Ownership and Overall Equipment Efficiency software to the Universidad Politecnica de Madrid's Instituto de Energia Solar. The software will be used as part of their advanced teaching and research in PV and solar energy.

Story at: http://biz.yahoo.com/bw/040616/165272 1.html

WWK: http://www.wwk.com/

6-16-04 SEI PV Manual [SEI Newsletter]

SEI has a new textbook, "Photovoltaics: Design and Installation Manual", which includes an overview of PV, detailed descriptions of PV system components, chapters on sizing systems, analyzing sites and installing PV systems, and detailed appendices.

SEI: http://www.solarenergy.org/

Sign up for Newsletter: http://list.solarenergy.org/signup.cfm

6-16-04 European Photovoltaic Industry Association

At the initiative of several parties during the 19th European PV Conference, including EPIA, 2000 participants formulated a contribution calling for the implementation of an Industrial Photovoltaic Policy for Europe. Also the European Industry Roadmap was launched, presenting European PV Industry priorities. And, the first results of the PV Catapult strategy implementation were presented. For details, contact EPIA epia@epia.org

EPIA: http://www.epia.org/

Roadmap: http://www.epia.org/07news/newsletter.asp

6-16-04 Sunbeam [Carolyn Beach]

For the latest issue of "Sunbeam", The eNewsletter of the American Solar Energy Society, with chapter news and articles on subjects such as the corporate tax bill (including energy), see: http://www.ases.org/chapter_newsletter/2004/MJ04/MJ04.html

6-16-04 Solar Forum

Presentations from the May 2004 Solar Forum in San Francisco, California, including topics such as greentags and performance-based incentives in California (Tom Starrs) are available on line at: http://www.californiasolarcenter.org/solarforum.html

California Solar Center: http://www.californiasolarcenter.org/index.html

6-16-04 Statistical Review of World Energy [Kevin Eber]

BP released its "Statistical Review of World Energy 2004", noting that PV capacity has increased more than 10 fold over the last decade. See EERE Network News for more information at: http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D06%2D16%27%7D#energy

6-16-04 Green Power Network

For the new look of the Green Power Network web site, see: http://www.eere.energy.gov/greenpower/. Also, the web site for the 9th National Green Power Marketing Conference, 4-6 October 2004 in Albany, New York can be found at: http://www.eere.energy.gov/greenpower/conference/ninth.html

6-16-04 Xantrex Inverters

Xantrex now has an upgraded warranty and new performance guarantee packages for its PV Series grid-tie solar inverters installed in the U.S. and Canada. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT77.htm

Xantrex: http://www.xantrex.com/applications/index.asp?did=965

6-16-04 U.S., Energy Bills

For the 3rd time in recent times, the House passed a comprehensive energy bill, this time H.R. 4503 with the same provisions as H.R. 6. The move was largely seen as symbolic, though in the unlikely event the Senate passes its version (S. 2095), the energy legislation could go to conference.

6-16-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Committee mark-up June 16. Full House consideration of Interior & Related Agencies Appropriations (includes Energy Conservation), June 16, see House Committee report 108-542 for details of the proposed legislation.

6-15-04 Triple-junction Concentrator Array

Engineers have deployed and tested a terrestrial triple-junction solar array rated at over 1 kW. Developed by a team comprising NASA Glenn Research Center, Boeing, and Entech, the concentrator array provides over 200 W per square meter power output at 600 V operation. The concentrator array uses 240 Spectrolab GaAs P/N solar cells; 2 concentrator modules form the array. Details will be presented at the "Solar Power from Space" conference, Granada, Spain at the end of June. Story at: http://www.compoundsemiconductor.net/articles/news/8/6/16/1

6-15-04 Printable Solar Cells

Konarka's technology is one example of printable solar cells, which are lightweight and flexible; see: http://biz.yahoo.com/bw/040615/155053 1.html. A review of this technology in "Solar-Cell Rollout", the cover story of the July/August 2004 issue of MIT's Technology Review, will be available June 22 at: http://www.technologyreview.com/

6-15-04 BP at Bonn

In total, the BP delegation to the Bonn renewables conference included 30 international representatives from Germany, England, Spain, France, and the U.S. BP was also represented with an exhibition on the new Saturn Solar Cell Technology during the Week of Environment. BP provided information on the new Real Power modules of the Saturn 7 series. Press at:

6-15-04 Australia, Solar and Wind Incentives

Australian Prime Minister John Howard is announcing solar and wind power incentives, which will form part of a \$A500m, 10-year energy statement called "Security Australia's Energy Future". Information at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=1697361&ResultCategoryType=2,7&NewsPageID=3

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=17000 17&ResultCategoryType=2,7&NewsPageID=3

6-15-04 Renewable Energy Finance Meeting Speakers (Mike Eckhart)

New Mexico Governor Bill Richardson, U.K. Energy Minister Stephen Timms, and German Legislator Hermann Scheer will address the Renewable Energy Finance Meeting in New York 23-24 June. [press release, American Council on Renewable Energy] Conference information: http://www.americanrenewables.org/

Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6934

6-15-04 Solar Photo Voltaics 2003 [Amy Cole]

The PV report from Research and Markets is available, with information on subjects from installed base to company profiles. For more information, see the web site at: http://www.researchandmarkets.com/reports/c1282/

6-15-04 Western Governors' Association Annual Meeting

WGA's annual meeting will take place 20-22 June 2004 in Santa Fe, New Mexico. In a session on June 22 on "A Western Clean and Diversified Energy Initiative", Governors will discuss with experts opportunities for developing a clean energy system for the West to capitalize on the region's immense energy resources. See agenda at: http://www.westgov.org/wga/meetings/agenda2004.htm

6-15-04 Siemens Solar Software

To download the SITOP solar select by Siemens Automation and Drives online, see:

http://www.siemens.com/index.jsp?sdc rh=null&sdc flags=null&sdc sectionid=0&sdc secnavid=0&sdc 3dnvlstid=&sdc countryid=0&sdc mpid=0&sdc unitid=999&sdc conttype=2&sdc contentid=11856 16&sdc langid=1&

http://www.ad.siemens.de/sitop/solar/html 76/download.htm

6-15-04 Carmanah's Solar-powered LED Order

Carmanah Technologies Corporation announced it has received an additional order for about \$370,000 from the U.S. Army to supply solar-powered LED aviation lights to 3 air bases in Iraq. Story at: http://www2.ccnmatthews.com/scripts/ccn-release.pl?/current/0615031n.html
Carmanah: http://www.carmanah.com/

6-15-04 Sustainable Energy Coalition Letter

In a letter sent to leadership of the Senate and House, 23 member groups of the Sustainable Energy Coalition called on members of Congress to work in a bipartisan fashion to enact tax provisions promoting renewable energy without further delay. [Ken Bossong, Sustainable Energy Coalition press].

6-15-04 U.S., Energy Bills

For coverage of the latest on the energy tax provisions, see SolarAccess at: http://www.solaraccess.com/news/story?storyid=6930. The House will debate 4 energy-related bills this week, including H.R. 4503, introduced by Joe Barton to replace H.R. 6 as comprehensive energy legislation http://www.gop.gov/Committeecentral/bills/hr4503.asp, and H.R. 4513 that expedites NEPA for siting renewable energy projects http://www.gop.gov/Committeecentral/bills/hr4513.asp.

6-15-04 U.S., Fiscal Year 2005 Energy Appropriations

FY 2005 Interior & Related Agencies bill on House floor June 16. House Energy & Water Development Committee mark-up June 16. The FY 2005 Agriculture Appropriations Subcommittee markup (June 14) contains renewable energy & energy efficiency provisions at \$15M (\$23 M in FY 2004).

6-14-04 Martin Wolf, in Memory

Solar energy pioneer Dr. Martin Wolf of Princeton, professor emeritus at the University of Pennsylvania, died of cancer May 20 at home. In memory... 1982 Cherry Award: http://ieeepvsc.nrel.gov/cherrywolf.html

6-14-04 Carmanah Solar Lighting

Carmanah Technologies has won a tender to retrofit bus shelters in West Covina, California with Carmanah i-SHELTER(tm) (i-SHELTERTM is a trademark of Carmanah Technologies, Inc.) solar powered LED lighting systems, with an initial contract for about \$81,000, and full tender of up to \$155,000. Story at Solarbuzz: http://www.carmanah.com/

6-14-04 U.K., GB2.2 Million for Solar

Energy Minister Stephen Timms announced an additional GB2.2m in funding awards for solar energy projects in the U.K. Story at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=16966 05&ResultCategoryType=2.7&NewsPageID=3

6-14-04 PV Specialists Conference

The 31st Photovoltaic Specialists Conference and Exhibition will be held 3-7 January 2005 at the Coronado Springs Resort, Lake Buena Vista, Florida. The Abstract & Extended Abstract Deadline is July 9, 2004. For more information, see the web site at: http://www.meetingassistant.com/PVSC/

6-14-04 U.S., Energy Tax Package

The House corporate tax bill will be debated today, and does not include the energy tax provisions as in the Senate version.

6-14-04 U.S., Energy Bills

The House will debate 4 energy-related bills this week, including H.R. 4503, introduced by Joe Barton to replace H.R. 6 as comprehensive energy legislation

http://www.gop.gov/Committeecentral/bills/hr4503.asp, and H.R. 4513 that expedites NEPA for siting renewable energy projects http://www.gop.gov/Committeecentral/bills/hr4513.asp.

6-11-04 EPV Research Papers & News

EPV is presenting two research papers in Paris at the 19th European PV Solar Energy Conference & Exhibition, one on development of nc-Si:H solar cells and one on CIGS devices, modules, and processing. In other EPV news, April 2004, the Tianjin Jinneng Solar Cell Corporation in Tianjin, China finished construction and installation of a 2.5 MW EPV IMS manufacturing facility for EPV a-Si modules. EPV news at: http://www.epv.net/news/news/news.htm

6-11-04 Solar Power Plant in China

Construction has started on a PV power plant with an installed capacity of 140 kW in Xingxingxia Town northwest of China's Xinjiang Uygur Autonomous Region. The plant is expected to be in operation February 2005. Story at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=1683973&ResultCategoryType=2.7&NewsPageID=3

6-11-04 Renewable Energy Project Handbook

The World Energy Council has issued a manual on projects in renewable energy. It is intended as an orientation aid for investors, companies, and government departments involved in the energy sector. Information at: http://www.german-renewable-

energy.com/www/main.php?tplid=6&aktuell_id=30&PHPSESSID=383a0ccb1a476a093c19b66f3c416f5e

6-11-04 ASES, Solar Energy Conference

The National Solar Energy Conference, SOLAR 2004, takes place in Portland, Oregon, 9-14 July 2004. For information, see: http://ases.org/solar2004/s04 main.htm

6-11-04 U.S., Energy Tax Package

The House corporate tax bill will be debated Monday, and does not include the energy tax provisions as in the Senate version.

6-11-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Committee mark-up June 15.

6-10-04 Sharp Solar Cell Production

Sharp Corporation announced it will increase its annual solar cell production capacity to 315 MW, an increase from the company's previous level of 248 MW announced last November. Sharp also plans to increase production capacity of its module assembly plants in Tennessee and Wales by year-end. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASMA37.htm Sharp: http://sharp-world.com/corporate/news/040609.html

6-10-04 ECN Screen-printed Silicon Solar Cells (Mariska van Rijn-Brak)

ECN is presenting a paper at the 19th European PV Solar Energy Conference in Paris on producing 16.5% screen-printed silicon solar cells with low-cost inline processing. Standard, commercially available multi-crystalline silicon wafers have been used. ECN sees possibilities to further increase the efficiency towards 18%, and to that end, new results obtained on the separate process steps will be integrated in the inline process. Paper available shortly at: http://www.ecn.nl/zon/index.en.html

6-10-04 SunPower's Technical Papers

See SunPower's web site for access to technical papers, including "Manufacture of Solar Cells with 21% Efficiency", June 2004, at:

http://www.sunpowercorp.com/html/Technical%20Papers/techpapers.html

6-10-04 GEMZ Solar-powered Laptop

GEMZ Corp. announced that its subsidiary, International Nanotechnology Corporation, is planning to develop a solar-powered solution for powering laptop computers. Per the article, the INC product is

believed to be the first to use PV Nanofilms, which combine thin films and nanotechnology so as to also work indoors in most lighting situations. Story at: http://biz.yahoo.com/bw/040610/105189 1.html GEMZ: http://www.gemzcorp.net/

6-10-04 More on Uni-Solar Air Force Contract

Additional coverage of Uni-Solar's contract with the Air Force Research Laboratory can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6899

6-10-04 Clean Energy

According to San Francisco-based technology research company Clean Edge, the wind, solar and fuel cells industries worldwide will all be high-growth markets over the next 10 years. Story, and access to report at: http://www.greenfutures.org.uk/briefings/Default.asp?id=1854&briefingtypedisplay=5

6-10-04 Venture Capital in Energy Industry

Energy Info Source has available its 4th Edition of the 190-page Venture Capital in the Energy Industry report. The report looks at venture capital funding of emerging energy technologies up through year-end 2003. See: http://www.energyinfosource.com/products/product.cfm?report ID=20

6-10-04 Solar Decathlon

The Crowder College Solar Team is in action, preparing their solar home for the next national solar decathlon. Story at: http://www.neoshodailynews.com/articles/2004/06/09/news/news04.txt http://www.eere.energy.gov/solar decathlon/

6-10-04 Canada, Geological Survey Solar

The Geological Survey of Canada needs 72 solar panels for its lab as soon as possible; only Shell Solar panels are eligible. There are 780 panels currently used at remote POLARIS observatories. The RFP closes June 14. This, and more news at: http://www.renewables.ca/main/main.php

6-10-04 Solar Power Savings

Last year, West Marine boating supply installed a 57.6 kW, 480-panel, solar power system on its store in Santa Cruz. In its first year of operation, it produced 5% more kWh than projected. Solar Technologies, which built the system, and West Marine are planning to install an informational kiosk about the system's performance. And, says Tom Carey, senior vice president at West Marine, the company would consider installing solar systems in other stores, where appropriate. Story at: http://www.santacruzsentinel.com/archive/2004/June/10/biz/stories/02biz.htm

6-10-04 More on Retirement of NREL Lab Director

NREL press on Richard H. Truly's retirement can be found at: http://www.nrel.gov/news/press/2004/2804 truly retires.html

6-10-04 U.S., Energy Tax Package

The House corporate tax bill will be debated Monday, and does not include the energy tax provisions as in the Senate version.

6-10-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up June 9. The Chairman's mark includes \$343 million for renewable energy programs, \$31.6 million below the budget request and \$1 million above fiscal year 2004. See Press at:

http://appropriations.house.gov/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=382&Month=6&Year=2004

http://appropriations.house.gov/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=383

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up (was held June 3) House Interior and Related Agencies Committee mark-up June 9. Press at: http://appropriations.house.gov/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=384

6-9-04 Uni-Solar Air Force Contract

United Solar Ovonic Corp. announced that the Air Force Research Laboratory at Kirtland AFB, New Mexico, has awarded Uni-Solar Ovonic a \$4.45 million, 18-month contract to develop new solar cell technology to be used in space and airship vehicles addressing defense and homeland security applications. Story at: http://biz.yahoo.com/prnews/040609/dew007_1.html http://www.uni-solar.com/

6-9-04 U.K., PV Concentrators

U.K. solar concentrator manufacturer Whitfield Solar Ltd has received venture capital from the Cascade Fund, a major milestone allowing the company to develop and manufacture the concentrating PV systems that have been the focus of research by George Whitfield and his team at The University of Reading. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6896

6-9-04 Australia Greenhouse Reduction

During a visit to Darwin, Dr. David Kemp, Australian Minister for the Environment and Heritage announced A\$1.57 million in Australian Government funding for 2 solar power projects at the remote Bradshaw and Kangaroo Flats Defense Training facilities. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASGO57.htm

6-9-04 More On Navajo Utility Solar and Wind Systems [Kevin Eber, EERE Network News]

The Navajo Tribal Utility Authority has installed 63 renewable energy systems at remote homes throughout the Navajo Nation. SunWize Technologies announced in May that it supplied 880-watt PV power stations, which also incorporate Southwest Windpower Wind turbines. More at EERE Network News:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D06%2D09%27%7D#6926

6-9-04 Colorado, Lab Director Retirement

Richard H. Truly, director of the National Renewable Energy Laboratory for more than 7 years announced that he plans to retire in early November.

http://www.denverpost.com/Stories/0,1413,36~53~2200821,00.html

http://cbsnewyork.com/national/BRF--Truly-Retirement-aa/resources news html

6-9-04 Colorado Renewable Energy Conference 2004 (Andy Walker)

In its 7th year, the conference will be held 25-27 June 2004 at the University of Denver. This year, the conference is combined with the National Renewable Energy Laboratory's Consumer Energy Expo. Information at: http://www.cres-energy.org/

6-9-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up maybe today (?).

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up (was held June 3) House Interior and Related Agencies Committee mark-up June 9.

6-8-04 RWE SCHOTT Solar Production

RWE SCHOTT Solar will increase its production of solar cells at its headquarters in Alzenau, Germany. The company is investing 40 million euros to create a capacity far exceeding 40 MW. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUMA43.htm
RWE SCHOTT Solar: http://www.rweschottsolar.com/

6-8-04 Uni-Solar ECO-SERIES Modules

United Solar Ovonic LLC, Uni-Solar, announced it has received TUV Approval for Module # ES-124 and ES-62 line of solar modules previously introduced in March 2004. More on these modules in the story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPT21.htm

Uni-Solar: http://www.uni-solar.com/

6-8-04 Spire Solar PV Systems for University

Spire Corporation announced that its subsidiary Spire Solar would deliver and manage the installation of PV systems on the campus of Roger Williams University in Bristol, Rhode Island. The systems will be about 4.5 kW and 7.2 kW, and will be funded by the University and a grant from the Rhode Island Renewable Energy Fund. Story at: http://biz.yahoo.com/bw/040608/85705 1.html

6-8-04 California, Coast Guard PV

At its training center in Petaluma, the Coast Guard now has a 125-kW PV system designed and installed by RWE SCHOTT Solar Inc. The system uses three arrays, one on the sloped roof of the barracks and 2 additional systems affixed to the flat roof on the training building. See details in the story at Solarbuzz, including photos: http://www.solarbuzz.com/News/NewsNAPR388.htm RWE SCHOTT Solar: http://www.rweschottsolar.com/

6-8-04 Tribal Developments in Renewables

The U.S. DOE has released a new brochure, Renewable Energy Development on Tribal lands showing renewable energy development and progress on 45 projects using wind, PV, biomass, and geothermal on Tribal lands. Story at: http://www.solaraccess.com/news/story?storyid=6875 Tribal Energy Program: http://www.eere.energy.gov/tribalenergy/

6-8-04 More on Total in Toulouse

Total Energie has approved the construction of a PV solar panel production plant in Saint-Martin-du-Touch in the Greater Toulouse area of France. The plant will be owned by Tenesol Technologies and will have a capacity of 15 MW. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUMA42.htm and SolarAccess: http://www.solaraccess.com/news/story?storyid=6890

6-8-04 More on Royal Petroleum's PV

Sun Power & Geothermal recently completed a 36.6 kW DC PV system for the Royal Petroleum Company headquarters in Santa Rosa, California. Press and photo at SolarAccess: http://www.solaraccess.com/news/story?storyid=6874

6-8-04 California, Emerging Renewables Rebate Procedures (Dale Trenschel)

Procedures for processing June 2004 Emerging Renewables Program applications can be found at: http://www.consumerenergycenter.org/erprebate/new_info.html

6-8-04 SunEdison Winner (Claire Broido)

Harvard Business School's annual Business Plan Contest challenges students to craft ideas for companies in general business and social enterprise. This year's Social Enterprise Track winner was SunEdison. Authors Brian Robertson (HBS MBA '04) and Claire Broido (HBS MBA '02) discuss their work at: http://hbswk.hbs.edu/item.jhtml?id=4157&t=nonprofit

6-8-04 Congressional Renewable Energy & Energy Efficiency Expo

Due to memorials for former President Reagan, the June 8 Expo has been cancelled. The Sustainable Energy coalition is exploring new dates, perhaps September 7. [Ken Bossong, 202-293-2898] and SolarAccess: http://www.solaraccess.com/news/story?storyid=6882

6-8-04 U.S. Comprehensive Energy Bill

The House "energy week" has been postponed due to memorials for former President Reagan. Environment & Energy (subscription) reports that it could be rescheduled as early as June 16.

6-8-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up maybe June 9.

House Energy & Water Development Committee mark-up maybe June 14.

Senate Energy & Water Development Subcommittee mark-up, maybe this week.

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up (was held June 3) House Interior and Related Agencies Committee mark-up June 9.

Senate Interior and Related Agencies Subcommittee mark up maybe this week.

6-7-04 SunPower PV Modules

SunPower Corporation announced its new solar-power product line, the first mass-produced PV modules utilizing SunPower's all-back-contact solar cells, with conversion efficiencies approaching 17%. Says Tom Werner, SunPower CEO, "SunPower's new PV modules set a new industry standard for efficiency and appearance". SunPower's new PV product line comprises two new modules types.

Story at: http://biz.yahoo.com/bw/040607/75270 1.html

SunPower: http://www.sunpowercorp.com/html/

6-7-04 WorldWater's California Headquarters

WorldWater Corporation announced that the company is opening its Western headquarters office in Foster City, near San Francisco. Company Vice President of Sales, Carsten Bethge will operate corporate sales from the new office, relocating and increasing sales and technical staff and inventory from the company's two smaller offices in Sacramento and Solana Beach. Story at:

http://www.primezone.com/newsroom/news releases.mhtml?d=58678

WorldWater: http://www.worldwater.com/

6-7-04 Philippines, Puerto Princesa \$55M Solar Power Plant

This article reports that Asera Group Inc., in a venture agreement with the government of Puerto Princesa City in Palawan will put up a \$55-M, 6.67-MW solar power plant (type?) in the city called Sinag 1 to generate about 10 million kWh of electricity a year. Story through Solarbuzz at: http://money.ing7.net/topstories/view_topstories.php?yyyy=2004&mon=06&dd=07&file=3

6-7-04 Germany, 2 MW Solar Park

The Minister for Environment and Forests of Rhineland-Palatinate, along with the Mayor of Neustadt an der Weinstrasse, RWE SCHOTT, and others officially inaugurated a 2-MW solar park in Neustadt an der Weinstrasse. The plant utilizes a total of 6,264 solar modules, configured in 7 separate units of 287 kW each. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR157.htm

6-7-04 Shell Solar in China

About 100 villagers from a remote Yunnan village in southwest China have access to electricity for the first time due to a Shell Solar project. The Shangnanyaoershi village is the first of 26 villages in Yunnan Province and the Xinjiang Uighur Autonomous Region to be connected to central solar electrification systems under the Shell project. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsASPR115.htm and

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=16649 56&ResultCategoryType=2,7&NewsPageID=3

Shell Solar: http://www.shell.com/home/Framework?siteId=shellsolar

6-7-04 Hawaii, Solar Bond

The Honolulu City Council passed the final City budget, including a \$7.85 M "solar" bond for clean energy and energy efficiency projects for city buildings. Adam Browning, Director of Operations for the

Vote Solar Initiative, conducted an analysis of the bond proposal. Said Browning, "It's not just good for the environment, but smart fiscal policy". Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO176.htm

6-7-04 France, Total in Toulouse

Total SA and its Total Energie will invest 6 million euro to build a new PV solar panel production facility in Toulouse, France. Press at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=Sector&template=2,2&NewsID=16644 88&ResultCategoryType=2,7&NewsPageID=3

6-7-04 Additional Coverage of Sanyo Production Capacity

Sanyo Electric has announced its intention to accelerate its growth in PV cell production capacity. The company will raise its short-term target production capacity for its Heterojunction with Intrinsic Thin Layer (HIT) technology from 133 MW to 153 MW. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASMA36.htm

6-7-04 More Coverage of Renewables 2004

Recent coverage of Renewables 2004 in Bonn, Germany, including statements by David Garman, U.S. acting under secretary of energy, can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6864 and http://www.solaraccess.com/news/story?storyid=6871

6-7-04 "A Solar Harvest' (Carolyn Beach)

The program for the National Solar Conference "Solar 2004: A Solar Harvest, Growing Opportunities", July 9-14, 2004 in Portland Oregon, can be found at: http://www.ases.org/

6-7-04 Photowatt International News

Photowatt has been awarded certification under the quality international standard ISO 9001 release 2000. Also Photowatt has introduced its new French partner, SOLARCOM. As Photowatt's distributor SOLARCOM Lyon will find solutions to individual and professionals PV modules needs, and to specific requirements for each installation. See these articles and more at the Photowatt June/July newsletter: http://www.photowatt.com/press/pdf_news/PDF_NEWS_32.pdf

6-7-04 More on World Renewable Energy Congress VIII and Expo (Robert Noun)

The Eighth World Renewable Energy Congress, to be held in Denver August 29 - September 3, 2004, continues to gain significant interest from around the world. Over 350 delegates from 70 countries have registered to date. Keynote speakers at the opening ceremony will include Stephen Timms, MP and Minister of Energy for the United Kingdom, the Honorable Hermann Scheer, member of the Bundestag and President of Eurosolar, John Mogford, Group VP for Gas, Power and Renewables, BP, and Dr. Abdulazia Othman Ahwaijri, Director General of the Islamic Educational, Scientific and Cultural Organization. A preliminary program will be available on the Congress Web site in early July. For current information or to register for the Congress, visit the web site at: http://www.nrel.gov/wrec

6-7-04 U.S. Comprehensive Energy Bill

The conference report for the House energy bill (H.R. 6) was introduced as a new bill (H.R. 4503), which will be debated in the House this week as part of House Republicans' "energy week". The Senate recently passed an energy tax package as part of a corporate tax bill, but House Republicans have said they would not do the same unless the Senate also approves authorizing provisions in comprehensive energy legislation.

6-7-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up probably June 10. House Energy & Water Development Committee mark-up maybe June 14. Senate Energy & Water Development Subcommittee mark-up, maybe this week.

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up (was held June 3) House Interior and Related Agencies Committee mark-up June 9. Senate Interior and Related Agencies Subcommittee mark up maybe this week.

6-4-04 SunPower Philippines Solar Cells

SunPower Corporation announced it has delivered the initial lot of its A-300 solar cells from its Philippines manufacturing plant, less than 2 months after opening the facility. Per the article, solar cells from this lot reached 19.9% efficiency. Volume production is on track for the 2nd half of 2004. The plant will initially produce 25 MW per year of silicon solar cells, and the building footprint is designed to allow future capacity expansion to more than 100 MW. More on these developments, and photo of cell, at Solarbuzz: http://www.solarbuzz.com/News/NewsASMA35.htm SunPower: http://www.sunpowercorp.com/

6-4-04 GEMZ Corp Subsidiary International Nanotechnology Corporation

GEMZ Corp announced it has formed a wholly-owned subsidiary, International Nanotechnology Corporation, and has signed a letter of intent with Terra Solar Development Corp. Upon completion of the acquisition, Dr. Zoltan Kiss will become CEO. Story at:

http://www.nanoinvestornews.com/modules.php?name=News&file=article&sid=2825

6-4-04 Sharp Miniature Solar Cells

The Sharp Corp has developed a new paper-thin solar cell. Two cells, the size of business cards, weighing 1 gram, can generate 2.6 Watts of electricity. Story at: http://www.eham.net/articles/8520?ehamsid=c2919d06454cbe83801d5551c910add7 http://story.news.yahoo.com/news?tmpl=story&u=/040528/1904/b052823ajpg

6-4-04 DayStar Presentation

DayStar Technologies, Inc., announced that it is scheduled to present at the J.P. Turner and Company/Solidity Capital Corporation Summer Investment Conference in Colorado 11-12 June 2004. Story at: http://biz.yahoo.com/prnews/040603/sfth077 1.html

6-4-04 Premier Homes "Zero Energy" Community (IREC Newsletter)

Premier Homes is now selling the first standard "zero energy" community of its kind in the Sacramento region - Premier Gardens. Consisting exclusively of "Zero Energy Homes", the community combines innovative construction and energy-efficient appliances with renewable energy systems such as ondemand water heating and solar electricity. Press highlighted through IREC at: http://builtbypremier.com/P_Gardens/news_zeroenergy.html
See this, and more news, in the IREC Newsletter of June 4 at:

http://www.irecusa.org/commout/enewsletter.html

6-4-04 DOE Solar Program Review Meeting (Susan Moon)

The DOE Solar Energy Technologies Program Review Meeting Web site is live. The meeting will be held in Denver, Colorado, October 25-28, 2004. This is a key event for participants in the DOE Solar Program, bringing together scientists, engineers, academicians, industry professionals, and managers from throughout the solar energy community. Learn more about the meeting at: http://www.eere.energy.gov/solar/review_meeting/

6-4-04 "Solar Power 2004"

Registration has opened for "Solar Power 2004", which will be held in San Francisco, California 18-21 October 2004. The event is being jointly presented by the Solar Electric Power Association and the Solar Energy Industries Association, and is co-hosted by the San Francisco Public Utilities Commission and the Pacific Gas and Electric Company. Information at Solarbuzz:

http://www.solarbuzz.com/News/NewsNACO220.htm

Solar Power 2004 Website: http://www.solarpower2004.com/

6-4-04 Update on Bonn Renewables Conference

See SolarAccess for an update on proceedings at the Bonn, Germany renewables conference at: http://www.solaraccess.com/news/story?storyid=6855

6-4-04 Canada Renewables

Release of an RFP for 300 MW of green power in Ontario has been delayed, in the province's 4th amendment to the process since April 28. The RFP is the first step of generating 5% of total power capacity from renewables by 2007, and 10% by 2010. See the Canadian Association for Renewable Energies at: http://www.renewables.ca/main/main.php

6-4-04 New York Renewable Energy

Governor Pataki has called for 25% of the state's electricity to come from renewable energy sources by 2013. Thursday, a state administrative law judge released a 144-page recommendation on how to achieve that goal. It is subject to approval by the Public Service Commission. Story at: http://www.wokr13.tv/news/state/story.aspx?content_id=949A5833-0882-46AC-ACC6-22D70F1EEA03

6-4-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up June 10.

House Energy & Water Development Committee mark-up maybe June 14.

Senate Energy & Water Development Subcommittee mark-up, maybe week of June 7.

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up (was held June 3)

House Interior and Related Agencies Committee mark-up maybe June 9.

Senate Interior and Related Agencies Subcommittee mark up maybe week of June 7

6-3-04 Sanyo, Sharp, Kyocera Solar Production

Sanyo Electric Co., Ltd plans to boost its solar cell production capacity by around 140% to 153 MW in 2005. The company is currently constructing a building at its factory site in Osaka Prefecture to increase the annual solar panel production capacity there to 133 MW in 2005. And, Sanyo plans to increase annual production capacity at its production subsidiary in Shimane Prefecture by 20 MW from 30 MW now. Sharp is expected to expand its annual production capacity to 300 MW, and Kyocera Corp increased its solar panel output capacity by 25% to 100 MW in March, with plans to increase to 120 MW by the end of June. Story at: <a href="http://bizns.nikkeibp.co.jp/cgi-bin/asia/show/nsh_contents.pl?NSH_BNO=%32%35%34%30%35&NSH_KKEY=%73%6f%6c%61%728NSH_CHTML=%6e%73%68%5f%63%6f%6e%74%65%6e%74%73%2e%68%74%6d%6c

6-3-04 More on Hitachi Dye Sensitizing Solar Cells

Hitachi developed a prototype of a large panel of dye sensitizing solar cells, which it unveiled at the nanotechnology exhibition held in Tokyo 17-19 March. According to the article, its photoelectric conversion efficiency was 9.3% in the lab. See the article for more on the structure of these cells at: http://bizns.nikkeibp.co.ip/cgi-

bin/asia/show/nsh contents.pl?NSH BNO=%32%34%39%39%32&NSH KKEY=%73%6f%6c%61%7 2&NSH CHTML=%6e%73%68%5f%63%6f%6e%74%65%6e%74%73%2e%68%74%6d%6c

6-3-04 Additional Coverage of Greatcell Solar

Greatcell Solar S.A. combined forces with Sustainable Technologies International of Australia to specialize in the Dye Solar Cell. Information at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6853

Greatcell Solar: http://www.greatcell.com/GSA%20Web%20English%2023102003/page2.html

6-3-04 Organic Solar Cell

The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety will fund a joint research project on organic solar cells by Germany's Hahn-Meitner-Institute, Covion Organic Semiconductors, and Aixtron. In this project, Aixtron will install an organic vapor phase deposition

system at the HMI for deposition of organic thin films. Story at: http://www.eurosemi.eu.com/cgi-bin/viewnew22.pl?id=5412

6-3-04 Schott Solar Solutions

At the "renewables 2004" conference in Bonn, the Schott technology group is showing a portfolio of forward-looking PV, solar-thermic products and solutions. Information at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=NewsSearch&Search=&ResultCategoryType=2,7&NewsPageID=5&NewsID=1636701&template=2,2&currPage=1

And related news on parabolic troughs:

http://www.centreforenergy.com/displayNewsArticle.asp?From=NewsSearch&Search=&ResultCategoryType=2,7&NewsPageID=5&NewsID=1634636&template=2,2&currPage=1

6-3-04 XsunX and MV Systems Venture

XsunX, Inc. announced it has entered into a letter of intent with Colorado-based MVSystems, Inc. The terms of the proposed agreement provide XsunX with exclusive licensing of MVSystems patent portfolio and technical know-how for use by XsunX in the development, commercialization and licensing of processes for the manufacture of semi-transparent PV glazing technologies. It also calls for a cooperative venture in which MVSystems will essentially operate as the R&D arm of XsunX under the guidance of Dr. Arun Madan, MVSystems founder and president. Story at:

http://www.primezone.com/newsroom/news_releases.mhtml?d=58575

MVSystems: http://www.mvsystems.info/

XsunX: http://www.XsunX.com/

6-3-04 More on Konarka and Chalmers

Patent assets related to Konarka's development of PV products have been transferred from Chalmers University of Technology to Konarka. The relationship also represents the beginning of a longer research cooperation between Chalmers and Konarka. More at: http://www.eurekalert.org/pub_releases/2004-06/src-ifc060204.php

6-3-04 PV Catapult Project

A half-day session on the PV Catapult project will take place 9 June 2004 at the 19th European PV Conference in Paris. PV Catapult: http://www.pvcatapult.org/

6-3-04 Clean Energy Industry Growth Forum

The 17th NREL Industry Growth Forum will showcase at least 35 promising clean energy companies poised for market growth. NREL is now accepting applications from clean energy companies who would like to present to an audience of the country's leading clean energy investors. Details at: http://www.incubator.com/nrel/apply.shtml

6-3-04 PV System Technologies

G. Cramer, M. Ibrahim, and W. Kleinkauf describe the current state-of-the-art and perspectives of solar PV as a solution in grid-connected and decentralized power supply structures in a story at ReFocus: http://www.re-focus.net/features/archive/janfeb04/janfeb04 full 2.html Also see other renewable energy news, such as an overview of the Bonn renewables conference, solar rebates in Austin, Texas, and news briefs, at ReFocus: http://www.re-focus.net/

6-3-04 U.K., Bishops Square PV

A £180,000 grant from the Energy Saving Trust and the Department of Trade and Industry will partially fund a solar installation at Bishops Square, which will cover about 600 m2. Story through Solarbuzz at: http://www.pandct.com/spot.asp?param1=5411

6-3-04 California Energy Commission Workshop

The California Energy Commission's Integrated Energy Policy Report Committee and the Renewables Committee will conduct a workshop on renewable distributed generation, to seek input for the 2004

IEPR update. The workshop will be held June 8 in Sacramento. More at: http://www.energy.ca.gov/2004 policy update/notices/2004-05-27 workshop notice.html

6-3-04 World Bank Renewables Support

The World Bank said it would increase the amount of money it lends for renewable energy projects by 20% every year for the next 5 years. Story at:

http://news.yahoo.com/news?tmpl=story&u=/afp/20040602/sc afp/environment energy 0406021708 02

6-3-04 Hawaii Renewables

At least 20% of a utility's electricity sales must be from renewable energy sources by 2020 under the "20/20 bill" signed by Governor Linda Lingle. Story at:

http://the.honoluluadvertiser.com/article/2004/Jun/03/ln/ln38a.html

6-3-04 More on Renewables 2004 Conference in Germany

Coverage of the opening of Renewables 2004 in Bonn can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6848 and sites such as: http://www.euractiv.com/cgibin/cgint.exe?204&OIDN=1507788&-tt=eg

6-3-04 Renewable Energy & Energy Efficiency Expo and Ice Cream Social (Ken Bossong)

The 7th Annual Congressional Renewable Energy and Energy Efficiency Expo and Ice Cream Social will be June 8, 2004, 10-5, in the Caucus Room on Independence Avenue, S.E., in Washington, DC. Over 50 companies will be represented. The Expo is co-sponsored by members of the Sustainable Energy Coalition and the House and Senate Renewable Energy and Energy Efficiency Caucuses. [Sustainable Energy Coalition press, Ken Bossong, Kbossong@hotmail.com]

6-3-04 U.S., Fiscal Year 2005 Energy Appropriations

House Energy & Water Development Subcommittee mark-up June 10.

House Energy & Water Development Committee mark-up maybe June 14.

Senate Energy & Water Development Subcommittee mark-up, maybe week of June 7.

House Interior & Related Agencies (Energy Conservation) Subcommittee mark-up June 3.

Senate Interior and Related Agencies Subcommittee mark-up maybe week of June 7.

The House Appropriations Committee Chairman's proposed spending allocations include \$27.99 billion for Energy and Water, up slightly from \$27.26 billion in FY 04.

6-2-04 ARISE Distribution Agreement

ARISE Technologies Corporation and EMJ Data Systems Ltd. announced that the companies have reached a distribution and financing partnership agreement, subject to TSX Venture Exchange approval. EMJ will assume responsibility for order fulfillment, will purchase all existing ARISE inventory, and will place orders for future inventory requirements. More on these developments at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO218.htm ARISE: http://www.arisetech.com/

6-2-04 Solar Electric Systems in Hawaii

The newly formed Maui-based California and Hawaiian Solar Power Co. is looking to install solar electric systems at no cost to commercial businesses as long as companies agree to buy the power the company produces. Story, including activities in Hawaii, through Solarbuzz at: http://www.bizjournals.com/pacific/stories/2004/05/31/focus5.html

6-2-04 California, PV Application at Pump Station

The Las Gallinas Valley Sanitary District serving residents of Northern Marin County recently completed an 81-kW solar power system that provides power to its reclamation pump station. The District selected Prevalent Power, Inc. to engineer, design and install the system, which is made up of 504 BP Solar 3160B PV modules. Story and photo at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6838 Prevalent Power: http://www.prevalentpower.com/

6-2-04 Japan, PV at Tsukuba Open Space Laboratory

PV installations at this location include circular cells fitted into a metal point glazing curtain wall, amorphous silicon cells fitted in the glazed roof of the central atrium, and a semi-transparent PV portico at the top of the front façade. All were designed to harmonize with the architecture. Story highlighted by pv-uk.org and reported by Renewable Energy World May-June 2004 at: https://www.ixi.com/magsandi/rew/2004 03/tsukuba.html

6-2-04 Japan, PV at AIST Tsukuba Center

This month's issue of PV Activities in Japan (subscription) includes several pages of text and photos on the National Institute of Advanced Industrial Science and Technology (AIST) installed PV systems at the Tsukuba Center. The PV installations at AIST Tsukuba center are called "Mega Solar Town" because the total capacity of new installed PV and existing systems exceeds 1 MW. Several types of PV modules are being demonstrated and evaluated. [This, and more news in "PV Activities in Japan", Osamu Ikki, RTS Corporation, ikki@rts-pv.com]

6-2-04 Thin Film PV Partnership LOI (Ken Zweibel)

The new Thin Film PV Partnership re-competition, focused on research and technology development work in copper indium diselenide and its alloys, cadmium telluride, and amorphous silicon, is now available for proposals. This is a major effort, with total potential funding of about \$10M per year for 3 years. The LOI can be viewed and downloaded at:

http://nreldev.nrel.gov/business opportunities/solicitations rfps.html

6-2-04 South Africa Solar Power Systems

The government has invited interested parties to bid for the contract to provide 40,000 solar power systems to rural areas as part of its electrification programme. Story through Solarbuzz at: http://www.bday.co.za/bday/content/direct/1,3523,1628537-6078-0,00.html

6-2-04 International Renewables Conference, Bonn

The International Conference for Renewable Energies takes place 1-4 June 2004 in Bonn. For updates throughout the conference - Renewables 2004 Bulletin — see: http://www.iisd.ca/sd/ren2004/httml/sdvol95num1e.html

Courtesy of Wolfgang Koch, other links include: Conference Programme

http://www.renewables2004.de/en/programme/default.asp

Live Feed: http://www.bundesregierung.de/ Conference site:

6-2-04 IEA on Clean Energy (Merwin Brown)

"Renewables could play a key role in the global energy mix with further commitment to research and development and technology innovation, but our study shows that unfortunately we still have a long way to go," said IEA Executive Director Claude Mandil. Mandil will present the study "Renewable Energy - Markets and Policy Trends in IEA Countries" at the renewable energy conference in Bonn this week. Story at: http://www.abc.net.au/news/newsitems/s1120449.htm

6-2-04 19th European Photovoltaic Solar Energy Conference and Exhibition

This conference and exhibition is being held in Paris 7-11 June 2004. The press release 1 June 2004 states that 1,800 participants are expected and 237 exhibitors have already registered. For details, see: http://www.photovoltaic-conference.com/index.html

6-2-04 EuroSun2004 & Intersolar 2004

EuroSun2004 will be held in Freiburg, Germany, 20-23 June 2004, followed by Intersolar 2004 24-26 June, Europe's largest trade fair for solar technology. More details at SolarAccess: http://www.solaraccess.com/news/story?storyid=6839

http://www.eurosun2004.de/ http://www.intersolar.de/index e.html

6-2-04 World Renewable Energy Congress VIII and Expo (Kevin Eber)

The World Renewable Energy Congress (WREC) will take place in Denver, Colorado, from August 29th through September 3rd. Held every two years, the Congress provides an international forum that attracts several hundred delegates from nearly 100 countries. This year's plenary speakers include Stephen Timms, the U.K. Minister of State for Energy, e-commerce, and Postal Services. An Energy Technology Expo is also running in conjunction with the Congress. See the WREC website at: http://www.nrel.gov/wrec/

Highlighted at EERE Network News:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D06%2D02%27%7D

6-2-04 Renewable Energy Weekly News

For the latest weekly renewable energy news from SolarAccess, visit: http://www.solaraccess.com/newsletter/weekly.html

6-2-04 Hybrid Solar Product

PV Systems is launching Solar Synergy - a hybrid solar product combining PV and solar water heating in one roof-integrated framework - at resource 04, 7-10 June 2004. Story through PV-UK at: http://www.resource04.com/newsdetails.jsp?id=17

PV Systems: http://www.pvsystems.com/

6-2-04 Photovoltaic Energy Barometer, Report (pv-uk.org)

This report, which includes PV capacity installed in the European Union and Poland in 2002 and 2003, share of on- and off-grid applications in 2003, PV cell production by country, industry growth, and much more information can be downloaded at: http://www.energies-renouvelables.org/observ-er/stat baro/eufores/baro160.pdf

6-2-04 Germany's PV Market

Germany is expecting 50% growth in PV installations this year, a good part of which will be in the form of MW-scale PV plants. Story highlighted by pv-uk.org and reported in Renewable Energy World, May-June 2004 at: http://www.ixi.com/magsandi/rew/2004 03/pastures new.html

6-2-04 Renewables in the U.K.

The "Renewables Network Impact Study" commissioned by DTI and the Carbon Trust highlights the planning system and transmission and distribution networks as he major potential barriers to reaching the Government's target to have 10% of electricity generated from renewables by 2010, with a doubling by 2020. Story through pv-uk.org at:

http://www.practicalhelp.org.uk/news/index.cfm?ty=1&newsid=253

6-2-04 California Energy Commission Guidebooks (Nancy Hassman)

The Renewables Portfolio Standard Eligibility Guidebook, application forms, and New Renewable Facilities Program Guidebook are on line at: http://www.energy.ca.gov/portfolio/documents/index.html

6-2-04 SolarOne Web site

SolarOne has reformatted its Web site, as part of pointing the company towards "application-oriented" products. Information on this transformation at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6842

http://www.solarone.net/

6-1-04 HelioVolt Award

HelioVolt Corporation has been awarded a Phase I SBIR contract by the Missile Defense Agency to further develop its device model for predicting the performance of CIGS PV devices, and then use the

model to determine the feasibility of using HelioVolt's patented FASST(tm) (FASSTTM is a trademark of HelioVolt Corporation) synthesis process to produce devices for electric power generation in high-altitude airships. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNATE23.htm and SolarAccess: http://www.solaraccess.com/news/story?storyid=6823

HelioVolt: http://www.heliovolt.com/

6-1-04 Uni-Solar Thin-Film PV Orders

United Solar Ovonic announced shipment of 500 kW of its flexible thin-film solar PV product to Solar Integrated Technologies. The shipment is part of the first 2.4-MW order placed by SIT since it signed an expanded strategic supply agreement with Uni-Solar in April. Under the agreement, SIT is expected to purchase more than 5 MW of Uni-Solar's PV in 2004, nearly 20% of Uni-Solar's annual production capacity. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6801 Uni-Solar: http://www.uni-solar.com/

Solar Integrated Technologies: http://www.solarintegrated.com/

6-1-04 ICOS Solar Cell Inspection Systems

ICOS Vision Systems Corporation NV announced the launch of inspection systems for solar cell production. The company plans to demonstrate these products at the 19th European PV Solar Energy Conference and Exhibition 2004, 7-10 June. Story at:

http://www.tmcnet.com/usubmit/2004/May/1044326.htm and

6-1-04 Sanyo Solar Cell Production

For those with a subscription, this reference was posted today: Sanyo Elec To Hike Solar Cell Production Capacity By 140%, Nikkei Interactive 01:55.

6-1-04 BP Solar Contract

BP Solar announced a US\$20M contract to supply solar power products and services to Thailand-based Solartron Co. Ltd. The products and services will be used by Solartron to construct solar power systems for the government-funded Mega Rural Electrification Project, which will light up to 120,000 homes. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPR114.htm
BP Solar: http://www.bpsolar.com/

6-1-04 Mission to UN Solar BIPV Project

The U.S. Mission to the United Nations in Geneva is set to become the first U.S. diplomatic building with a building-integrated solar electric system. Solar Design Associates, Inc., of Harvard, Massachusetts provided design and engineering for the solar electric systems, and will oversee installation. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6797 Solar Design Associates: http://www.solardesign.com/

6-1-04 California, Glendale PV System

The Glendale City Council approved the Glendale Water & Power-Glendale Community College Energy Partnership proposal to construct a split-level parking structure with a 400-kW solar PV carport on two floors. Details and the structure of a forthcoming Request for Bid for installation of the PV system were to be determined. Story and contact information at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR383.htm

6-1-04 RWE Schott Solar and Permacity

RWE Schott Solar, Inc. is working with Permacity Corporation to help develop the PV market in the Los Angeles area. Said Marc Roper, director of sales for RWE Schott Solar, "Permacity brings a new level of financial sophistication to the PV value proposition, making PV an even more economical choice for its commercial customers and a profitable business for Permacity. With the company's expertise in commercial real estate, it has an insider's understanding of this market segment and can

work to help building owners with tax incentives and capital expenditures relevant to their individual needs". Story and photos at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR381.htm RWE Schott Solar: http://www.rweschottsolar.us/

Permacity: http://www.permacity.com/

6-1-04 Massachusetts, PV Action Plan

See "Crafting a Photovoltaic Action Plan in the Bay State" authored by Robert Pratt, director of the state's Renewable Energy Trust, which is administered by the Massachusetts Technology Collaborative. Article at SolarAccess: http://www.solaraccess.com/news/story?storyid=6789 MTC: http://www.masstech.org/netmac.asp

6-1-04 California, PV System for Royal Petroleum

Sun Power & Geothermal Energy completed a 36.6-kW DC solar PV system for the Royal Petroleum Company headquarters in Santa Rosa, California. The system is mounted on the corrugated metal roof of the headquarters building and is monitored real time by Sun Power's SunSpot® PV monitoring system, which sends live energy generation data over the Internet to verify performance and return on investment. Story and photo at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR385.htm Sun Power & Geothermal Energy: http://www.sunpowergeo.com/

6-1-04 Total Energie Solar Systems

The U.S. AID has awarded a telecommunications project to Hialeah Telecommunications for a project in Peru using Total Energie PV systems. Total Energie Latin America will provide 127 35-kW PV systems for the project called "Cobertura con Calidad". Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsSAPR26.htm

Total Energie: http://www.total-energie.fr/eng/index.htm

6-1-04 German Solar Industry

The German solar industry doubled its production in 2003 compared to 2002, and hopes for similar growth this year. According to a report presented in Berlin, the industry raised production from 38 MW in 2002 to 83 MW in 2003, and forecasts a growth of 180 MW for 2004. Story at: http://www.dw-world.de/english/0,.1431 A 1220179 1 A,00.html

6-1-04 PV Analyst at Strategies Unlimited (Tim Carli)

Strategies Unlimited announced the appointment of Paula Mints to the position of senior analyst. In this position, Mints has primary responsibilities in SU's market research and consulting practices in PV technologies and other areas of the energy and utility industries. SU will release a number of industry reports in the next 6 months that include "Global Analysis of Photovoltiac Markets & Application Forecast", "Analysis of Manufacturer Shipments and Capacity", and "Balance of Systems (BOS) Market Overview". [Strategies Unlimited press release 27 May 2004]

6-1-04 Using More Renewable Energy, Report

"A Balanced Energy Plan for the Interior West," prepared by Western Resource Advocates, a Boulder, Colorado-based environmental policy group, concluded that using more renewable energy and increasing energy efficiency in Colorado, Utah, Arizona, New Mexico, Nevada, Wyoming and Montana would lower energy costs, stabilize electric system reliability, and protect public health and the environment. The report is available at: http://www.denverpost.com/Stories/0,1413,36~33~2169442,00.html

6-1-04 Finance Forum & Directory (Mike Eckhart)

"Renewable Energy Finance Forum: Wall Street," will take place June 23-24, 2004 at the Metropolitan Club in New York City. Sean Harrigan, President of the Board of the California Public Employees Retirement System (CalPERS) will deliver a keynote speech at this forum. CalPERS recently announced that it will commit up to \$200 million as part of the Green Wave initiative led by California Treasurer Phil Angelides. Harrigan will join more than 40 leaders in clean and renewable energy

finance to present perspectives on the current renewable energy marketplace and review recent transactions. Speakers include Dan Reicher, a conference co-chair, former U.S. Assistant Secretary for Energy Efficiency and Renewable energy, and president of New Energy Capital.

The American Council on Renewable Energy announced it will publish a North American Energy Finance Directory, a draft of which will be released at its finance conference. Information at ACORE: http://www.americanrenewables.org

6-1-04 Austin Energy's Solar Rebate Program

Austin Energy's solar rebate program which offers a \$5/watt incentive "to encourage its customers to purchase and install grid-connected solar energy systems" was set to go on line today. Story at: http://www.austinchronicle.com/issues/dispatch/2004-05-28/pols_naked3.html
http://austin.bizjournals.com/austin/stories/2004/05/24/daily42.html?ist=b In hI

6-1-04 Certified Energy Practitioners

The North American Board of Certified Energy Practitioners announced completion of the 2nd administration of its Solar PV Installer Certification Exam, certifying an additional 44 individuals. The next exam is scheduled for September 18, 2004. Story and contact information at SolarAccess: http://www.solaraccess.com/news/story?storyid=6787

6-1-04 Solar Cars, Bikes, Bands, and Boats

Solar cars developed by 18 teams from 10 countries will be on the road for the Phaethon 2004, a week-long rally race to commemorate the 13-29 August Summer Games. Teams will drive south from Athens to Olympia, then north to Delphi and back to Athens. Story at: http://www.canoe.ca/NewsStand/CalgarySun/News/2004/05/28/476378.html

The 2004 Formula Sun Grand Prix, featuring cars built by colleges and universities from North America was held May 19-21 at Heartland Park Topeka. Story at: http://www.solaraccess.com/news/story?storyid=6809

With speeds averaging over 30 miles an hour, the Saint Thomas Academy Experimental Vehicle Team set a new Solar BikeRayce national record, completing 100 km in 1:52:36 at the annual Solar BikeRayce USA. Story at: http://biz.yahoo.com/prnews/040526/cgw059 1.html
Solar BikeRayce USA: http://www.solarbike.org/

A futuristic band made up of robotics and powered by solar cells has been created by Long Beach Polytechnic High School's AP Physics students. A film student is making a DVD capturing the building of Polysonic, which will be ready to ship in July. Story at: http://www.gazettes.com/grunionpoly05272004.html

A student team from Canyon High School of Anaheim took first place in the 3-day Solar Cup, a solar-powered boat race sponsored by the Metropolitan Water District of Southern California. Story at: http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 http://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 <a href="https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 <a href="https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 <a href="https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20040523 <a href="https://homesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&news_v

In related news...

6-1-04 "Solar Catalytic Hydrogen Generator"

Solar Hydrogen Energy Corporation's test unit, called a "Solar Catalytic Hydrogen Generator" was recently put into field operation at the APS Solar Test and Research facility in Phoenix, Arizona. More on the concept and field tests, including photos of the solar concentrators, at SolarAccess: http://www.solaraccess.com/news/story?storyid=6828 and http://www.shec-labs.com/

APS STAR facility: http://www.aps.com/my_community/STARtour/default.html?seq=1

MAY

The NCPV Hotline will be off-line May 24 – 31.

5-21-04 SolarWorld AG Update

After three months, solar cell sales (8.8 MW) have almost matched total 2003 numbers (9 MW). More on the corporate update for SolarWorld AG can be found at: http://www.solarworld.de/eng/englisch/pages/home_idx.htm

5-21-04 Jacksonville, Florida, City Energy Program

JEA and its energy services subcontractor, Chevron Energy Solutions, have installed solar systems at City Hall, the Prime Osborne Convention Center, and the Police Memorial Building. JEA is among the top utility producers of solar power nationwide, and has brought 222 kW of solar power on line since launching the solar initiative in 1999. And, JEA receives credit for 5,188 kW being generated through a Solar Initiative Program started in 2002. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR379.htm

JEA: http://www.jea.com/

5-21-04 Massachusetts Collaborative

A Massachusetts Technology Collaborative incentive program called "Sun Power for New Homes" offers qualified homebuilders the same types of incentives for PV systems as existing-home owners. Says John Livermore who manages the program for Sun Power, "We're trying to encourage builders and individuals to include solar electricity systems as a feature - not an option - in new homes". Story at:

http://business.bostonherald.com/realestateNews/view.bg?articleid=28785

5-21-04 California Energy Commission Solar Schools

The California Energy Commission has approved implementation of the Solar Schools initiative. More about this program can be found at:

http://www.consumerenergycenter.org/solar schools/index.html

Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO174.htm

5-21-04 California, SolarCraft Services PV

SolarCraft Services has secured a contract to design and install a 106-kW PV system using RWE Schott Solar panels for Avalon Natural Products of Petaluma, a manufacturer of natural and organic personal products. SolarCraft will install a non-penetrating roof mounting system, and ASE 300 solar panels. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6779

RWE Schott Solar: http://www.solaraccess.com/marketplace/compdetail?compid=1418

5-21-04 California, Shell Solar Installation (Tina Nickerson)

Dale Wolfgram, executive director of the Los Angeles Lutheran Junior and Senior High School, coordinated the installation of a 52-kW Shell Solar electric system at the school, comprising more than 400 Shell Solar SP140 panels. [Tina Nickerson, Shell Solar Press with Photos] Story and photos at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR380.htm Shell Solar: http://www.shell.com/home/Framework?siteld=shellsolar

5-21-04 Washington, DC Renewables

A hearing is taking place today in Washington, DC regarding a bill that would require a percent of the City's electricity to come from renewable energy sources. The DC Clean Energy Bill is supported by a broad coalition. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6784

5-21-04 More on Global Solar Energy Canopy

Additional coverage of Global Solar's canopy for the Antelope Valley Transit Authority, and photos, can be found at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR378.htm Global Solar: http://www.globalsolar.com/GLOBAL_FLASH.htm

5-21-04 Interstate Renewable Energy Council Newsletter

For the latest on Million Solar Roofs to Zero Energy Buildings to Schools Going Solar, see the IREC newsletter at: http://irecusa.org/

5-21-04 U.S. FY 2005 Budget Resolution

The Senate will break for a week without having passed the FY '05 budget resolution, which has been passed by the House. Environment & Energy Daily (subscription) reports that even without a final budget resolution, the House Appropriations Chairman met last week with his 13 appropriations subcommittee chairmen to distribute tentative allocations to start moving the bills. [E&E Publishing: E-mail: pubs@eenews.net * Phone: 202-628-6500]

5-21-04 The Solar Sound Stage

Lollapalooza will power one of its stages with solar. Tour founder Perry Farrell said he's extremely impressed that the custom-built sound and stage system runs without fail. The Solar Sound Stage will be headlined by Mike Watt and the Secondmen. Lallapolooza will also feature Morrissey, Sonic Youth, Flaming Lips and Polyphonic Spree. Story at: http://www.clickondetroit.com/entertainment/3327515/detail.html

5-20-04 Global Solar Canopy

Global Solar Energy has designed and installed a PV canopy for the Antelope Valley Transit Authority in California. The canopy includes 405 ASE 300/DGF modules, a Xantrex PV 100208 DC to AC inverter, and a 125kVA 208/480 step-up isolation transformer. Story at: http://biz.yahoo.com/bw/040519/195894_1.html
Global Solar: http://www.globalsolar.com/mediacenter/newsreleases/2004/GSE040519.htm

5-20-04 Greatcell Solar

Greatcell Solar S.A. of Switzerland combined forces with Sustainable Technologies International of Australia to become a European leader in dye-solar cells (DSC). Greatcell Solar's website-corporate information gives 2004 as the timeframe to establish first-phase manufacturing in Europe, and 2005 to establish volume manufacturing in Europe. For more on this company, including a recent grant, see Photon International (hardcopy) May 2004. Greatcell: http://www.greatcell.com/GSA%20Web%20English%2023102003/page2.html

5-20-04 Applied Films Solar Cell Coating Process

In cooperation with the Fraunhofer Institute for Solar Energy, Applied Films Corporation has developed a new coating process technology for wafer-based solar cells. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUTE13.htm
Applied Films: http://www.appliedfilms.com/

5-20-04 Connecticut Solar Program

The Connecticut Clean Energy Fund approved \$2 million for a new residential solar PV program to complement its existing commercial PV program. More on the program at SolarAccess: http://www.solaraccess.com/news/story?storyid=6765

Connecticut Clean Energy Fund: http://www.ctcleanenergy.com/

5-20-04 TrueSolar Solutions & So. Cal Edison

California Energy Markets (subscription) reports that the California Public Utilities Commission has rescinded its previous approval of a power-purchase agreement between Southern California Edison and solar-power developer TrueSolar Solutions Inc. See Decisions at CPUC http://www.cpuc.ca.gov/

5-20-04 U.S. House Budget Resolution

The House passed the FY 2005 budget resolution last night, which now must be reconciled with the Senate. With this version of the resolution, Congress would use the \$821 billion figure for discretionary spending as its ceiling in drafting the 13 annual appropriations bills. Within the resolution are specific function categories, with energy being function 270. For 270, the budget deal allocates \$3.03 billion, down from FY 04 of \$3.59 billion.

House Budget, Legislative Text, etc.: http://www.house.gov/budget/

5-20-04 U.S. House Science Hearing Summary

An overview of the May 19 hearing on Efficiency and Renewable Energy Resources can be found at: http://www.house.gov/science/press/108/108-252.htm

Prepared Testimony can be found under "Democratic Office" under the Energy Subcommittee hearing at the House Science Website.

5-20-04 Solar-powered Plane

The National Aeronautics and Space Administration is providing \$63,000 in seed money from its Institute for Advanced Concepts for the University of Missouri-Rolla to pursue a new idea for a solar-powered plane. The machine they plan to build will be a bit larger than an eagle, and will use solar energy to flex its wings during the day, climbing higher, and then soar through the night. Story at:

http://abcnews.go.com/sections/SciTech/DyeHard/flapping wings airplane dyehard 040519-1.html

5-20-04 More on Worldwatch Report

Additional coverage of the Worldwatch report on the future of renewable energy can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6772

5-19-04 Mass Production of PowerGlaz

BP Solar and Romag will start mass production of their new PowerGlaz later this month. Said Romag Sales Director Keith Morrison, "By using the latest processing technology, we will be able to offer PowerGlaz in a range of sizes up to 3.3m x 2.2m." Story and photos at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPT20.htm

BP Solar: http://www.bpsolar.com/ Romag: http://www.romag.co.uk/

5-19-04 WorldWater Solar Shipment

WorldWater Corporation announced it is shipping an additional \$1.75 million of equipment to the Cerro Cosso Community College solar jobsite in Ridgecrest, California. WorldWater is the exclusive PV supplier. Story at: http://biz.yahoo.com/pz/040519/57753.html

WorldWater: http://www.worldwater.com/

5-19-04 Sun Power & Geothermal Energy Expert

Sun Power & Geothermal Energy has hired renewable energy financial expert Todd Lindstrom. Lindstrom will be Director, Business Development, shaping Sun Power's financial offerings for

solar energy systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO214.htm Sun Power & Geothermal Energy: http://www.sunpowergeo.com/

5-19-04 Energy Tax Provisions and "Green Bonds" Amendment

The Solar Energy Industries Association has called on the U.S. House of Representatives to include renewable energy provisions in its version of the JOBS Act, including a "green bonds" amendment authored by Senator Wayne Allard that's included in the Senate version that passed last week. More on this legislation and SEIA's position at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6762

SEIA: http://www.seia.org/

5-19-04 California Senate Solar Bill

A percentage of new homes in California would have to be equipped with solar energy systems under a bill approved Monday by the state Senate. The requirement would start in 2006. Story through Solarbuzz at: http://www.sfgate.com/cgi-

bin/article.cgi?file=/news/archive/2004/05/17/state1849EDT0102.DTL

Also: http://sacramento.bizjournals.com/sacramento/stories/2004/05/17/daily10.html

5-19-04 EPIA General Meeting

EPIA's May 7 Annual General Meeting opened with the conference "Let's Bet on the Sun". All presentations from the conference are now on line. http://www.epia.org/

5-19-04 TNO and ECN Collaboration (M.J.M. Lortzer)

TNO and ECN are going to collaborate strategically in the field of energy in the built environment. The new collaboration will result in a broad package of services for the market, and effective input of government resources. [Joint corporate communication through E-mail pressinfo@tno.nl; information available from TNO-Berrie van Kampen E-mail b.vankampen@bouw.tno.nl or ECN-Marije Lafleur@ecn.nl]

5-19-04 U.S. State and Utility Clean Energy Successes (Kevin Eber)

See coverage of New York, Pennsylvania, Wisconsin, and Pacific Northwest clean energy program successes at EERE Network News May 19:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D05%2D19%27%7D#6879

5-19-04 South Korea Renewables Investment

South Korea will invest 250 billion won (U.S. \$213M) in developing renewable energy over the next 5 years according to the Ministry of Commerce. Information at: http://www.vonhapnews.co.kr/Engnews/20040519/300100000020040519163955E0.html

5-19-04 Polish Energy Law

A series of amendments to Poland's energy law relating to further promotion of renewables will result in major changes to the current environment for renewable energy projects. Information at: http://www.gasandoil.com/goc/news/nte42061.htm

5-19-04 More on the U.S. House Science Subcommittee Hearing Today

The House Science Energy Subcommittee hearing on "The Impact of Federal Energy Efficiency and Renewable Energy Research and Development Programs" will hear from Steve Nadel, executive director, American Council for an Energy Efficient Economy; Paul Konove, president, Carolina Country Builders of Chatham County, Inc.; Vivian Loftness, head, School of Architecture, Carnegie-Mellon University; John Carberry, director, Environmental Technologies, DuPont

Central Research & Development; Peter Smith, president, New York State Energy Research and Development Authority; Daniel Sosland, executive director, Environment Northeast.

5-19-04 More on Solar-powered Boat Competition

Twenty-two southern California high schools are working to finish their solar-powered boats to compete in the Solar Cup this weekend. The 3-day event helps promote stewardship of natural resources and alternative technologies through a series of endurance and sprint races. More at: http://biz.yahoo.com/bw/040518/185786 1.html

5-19-04 More on Solar Car Competition

Gato Del Sol, the University of Kentucky's solar car, returns to competition this week in the Formula Sun Grand Prix 2004 in Topeka, Kansas. Story at: http://www.courier-journal.com/features/2004/05/18/solarcar.html

5-19-04 U.S. FY 2005 Appropriations

There's much speculation as to what might happen with the FY 05 appropriations process, given the election year. The latest action is that a Congressional "agreement" has been reached on the FY 05 budget resolution for discretionary spending, which once passed can be used as the ceiling in drafting the 13 appropriations bills.

5-18-04 BP Research Grants to Delaware Universities

The University of Delaware and Delaware State University announced that BP and the BP Foundation have awarded them \$3.75 million in renewable energy research and products. The research will focus on developing higher efficiency solar cells at lower costs and a range of research on hydrogen fuel cell technology. The partnership with the University of Delaware includes a BP Solar donation of \$1.5 million in equipment, and a \$1.35-million grant to the Institute of Energy Conversion in support of its solar energy research program. Coverage at

Solarbuzz: http://www.solarbuzz.com/News/NewsNATE22.htm and

http://biz.yahoo.com/prnews/040517/nym172 1.html and

http://www.delawareonline.com/newsjournal/local/2004/05/18bphelpsfundsola.html

BP Solar: http://www.bpsolar.com/
IEC: http://www.udel.edu/iec/index.html

5-18-04 "Factor of Five" - Interview with Solar Pioneer Bill Yerkes

Bill Moore interviews Bill Yerkes on cutting the cost of solar cells in an article at EVWorld (subscription). Fifty years ago, Bell Lab scientists introduced us to the silicon PV chip, and steady progress has been made since. The relatively new company, Solaicx, at which Yerkes is Chief Technology Officer, plans to reduce costs through an advanced manufacturing process for crystalline silicon PV. Solar cells, ethanol, and more at EVWorld:

http://www.evworld.com/view.cfm?section=article&storyid=697 (subscription)

Solaicx: http://www.solaicx.com/

5-18-04 Energy Conversion Devices 3rd Quarter Results

Energy Conversion Devices, Inc. announced its operating results for the 3rd quarter ending 31 March 2004. According to the article, United Solar Ovonic (a 100% owned subsidiary) reached an agreement with Solar Integrated Technologies, Inc. for sales of over 5 MW of product in 2004 with provisions for larger volumes in future years; received a 1.25-MW order from Sunset of Germany with a commitment for another 3.5 MW in FY 2005; and received a 1-MW order from ThyssenKrupp of Germany. Also, the Air Force Research Laboratory selected United Solar Ovonic to provide 3 kW of lightweight solar cells for one of its satellites, and Lockheed Martin entered into a contract with United Solar Ovonic to supply solar cells for evaluation in a high-

altitude airship program. Information at: http://biz.yahoo.com/prnews/040517/dem026 1.html ECD Press: http://www.ovonic.com/news events/5 2 press releases/20040517b.htm

5-18-04 Solar and Wind-Powered Hydrogen

The Illinois Coalition is receiving a \$54,000 grant from Illinois Clean Energy Community Foundation to develop Illinois' first hydrogen fueling station powered by renewable resources. The project will be housed at Rockford's Greater Northwest Chicagoland Regional Airport. Hydrogen generated by solar and wind will provide stationary heat and power for an airport building and transportation fuel for the zero-emission airport vehicles. Story at: http://biz.yahoo.com/bw/040518/185184 1.html

5-18-04 Renewable Energy Certificates

An article about emerging markets in Renewable Energy Certificates can be found at: http://www.energypulse.net/centers/article/article_display.cfm?a_id=723

5-18-04 Crystalline Silicon Solar Cells and Modules Workshop (Sandy Padilla)

The "14th Workshop on Crystalline Silicon Solar Cells & Modules: Materials and Processes" will be held August 8-11, 2004 in Winter Park, Colorado, USA. The workshop is intended to address the fundamental properties of PV-Si, new solar cell designs, and advanced solar cell processing techniques. A combination of oral presentations by invited speakers, poster sessions, and discussion sessions will review recent advances in crystal growth, new cell structures, new processes and process characterization techniques, and cell fabrication approaches suitable for future manufacturing demands. The workshop will provide a forum for an informal exchange of technical and scientific information between international researchers in the photovoltaic and relevant non-photovoltaic fields. It will offer an excellent opportunity for researchers in private industry and universities to prioritize mutual needs for future collaborative research. For more information or to register, visit the website at: http://www.nrel.gov/silicon_workshop/ or contact Dr. Bhushan Sopori at: bhushan_sopori@nrel.gov or Sandy Padilla at sandy padilla@nrel.gov or Sara Huntley at sara huntley@nrel.gov

5-18-04 WorldWater Corp. Energy Grant

WorldWater Corporation announced it has been awarded a \$377,500 grant from 1st Rochdale Cooperative Group Ltd of New York City to join forces in developing solar projects in New York. Said Anand Rangarajan, WorldWater's Executive Vice President, "The combination of our technology and project implementation expertise, together with 1st Rochdale's aspiration to provide green power to its customer base, is expected to bring cost effective solar power solutions to thousands of customers." Story at: http://biz.yahoo.com/pz/040518/57685.html WorldWater: http://www.worldwater.com/

5-18-04 Solar Power 2004

See the website for Solar Power 2004, conference and expo, 18-21 October in San Francisco, California, at: http://www.SolarPower2004.com/

5-18-04 Intersolar 2004 and EuroSun 2004

Intersolar 2004 will be held 24-26 June 2004 in Freiburg, Germany. See http://www.intersolar.de/index_e.html for more information. The European Solar Conference EuroSun2004 takes place 20-23 June 2004 in Freiburg, and is hosted and organized by the International Solar Energy Society.

5-18-04 Database for Residential Solar PV Sales (Tony Jones)

Engency Inc. has built and compiled a retail customer database available for the solar industry.

Says Tony Jones, company representative, "The time is right for a product like this because of all the new capacity entering the sales channel. Our tool is ideal for the manufacturer that would like to push strong sales volume through their distributor and retailer system." Engency press release 415-381-1783.

5-17-04 Spain, Solar Pergola

Spain's King Juan Carlos officially opened the World Forum of Culture in Barcelona, which includes the Solar Pergola with a rated peak power of 444 kW. The Solar Pergola consists of 2,668 Isofoton monocrystalline modules. Phonix SonnenStrom AG supported the design phase, advised on the technical evaluation process, and provided technical know-how on development of the monitoring concept. A total of 1.3 MW of PV modules will be installed on the site. Story and photos at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR153.htm

Phonix SonnenStrom: http://www.SonnenStromAG.de/

Isofoton: http://www.isofoton.es/

5-17-04 Germany, 1-MW PV Project

BP Solar 160-Watt (BP Solar 3160 QA) multi-crystalline PV modules at the Pfeifer facility in Memmingen have been connected to the grid. The installation totals 936 kW peak, with 5,852 modules. Story and photo at Solarbuzz: http://www.bpsolar.com/

5-17-04 Uruguay Energy Efficiency Project

This project is funded by a \$6.8 million grant from the Global Environment Facility. As part of the project, 2,000 solar electricity systems will be provided to families whose homes lack electricity. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsSAGO2.htm

5-17-04 More on BP and Romag's PowerGlaz

Additional information about PowerGlaz, the solar electric glass developed by BP Solar and Romag, can be found at the BP Press site: http://www.bpsolar.com/DisplayNews.cfm?id=83

5-17-04 U.S., House Science Committee Hearing

A House Science hearing is scheduled for May 19 on "The Impact of Federal Energy Efficiency and Renewable Energy R&D Programs." According to Environment & Energy Daily (subscription), Charles Fox, New York's deputy secretary for energy and environment, is expected to discuss Governor George Pataki's plans for a statewide 25% RPS to be in place within the next 10 years.

E&E Publishing, LLC: E-mail: pubs@eenews.net * Phone: 202-628-6500

5-17-04 China's Renewable Energy

China has established renewable energy as a basic national policy, and a new law is being drafted to provide legal support to develop it. Story through Solarbuzz at: http://www.chinadaily.com.cn/english/doc/2004-05/17/content_331229.htm

5-17-04 Carmanah's Sales

Carmanah Technologies Corporation has sold an additional \$110,000 worth of its "Dual Flash IQ" LED crosswalk lighting systems through its U.K. distribution partner, Solagen Ltd. Using Carmanah's solar/LED technologies, the DUAL Flash IQ products were introduced in the U.K. and European markets in 2001. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR376.htm

Carmanah: http://www.roadlights.com/

5-17-04 Sacramento Municipal Utility District Solicitations (Green Power Network)

See the Request for Information and Qualifications for Renewable Power Purchase at: http://www.bids.smud.org/sys/user/Sys056.asp (click "All Solicitations", go to Page 6, look under "Future Solicitations")

Green Power Network: http://www.eere.energy.gov/greenpower/home.shtml

5-17-04 More on the Navajo Reservation Solar Solution

Additional coverage of the 63 small, solar-electric power installations and small wind turbines completed on the Navajo Reservation in Arizona can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6735. The 880-Watt residential SunWize Power Stations use Shell Solar modules and Southwest Windpower wind turbines, and comply with the National Electrical Code.

5-14-04 In fond memory of Jack Stone - long-time spirit of the daily NCPV Hotline - who left us last May.

5-14-04 U.S., Senate's Renewable Energy Tax Credits (Jesse Broehl)

This week, the Senate passed S. 1637, a corporate tax bill to which the energy tax provisions were attached. Coverage of the renewable energy provisions can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6729. Some analysts are estimating that the cost of the energy tax package is more like \$18 billion rather than \$13 to \$14 billion, which will certainly play into the continuing debate as the House considers its path forward (see Alliance "News You Can Use" May 14, http://ase.org/)

5-14-04 Ground Mount Solar-Electric Generator

SolarOne(tm) (SOLARONETM is a trademark of Solar One Solutions) announced availability of its new Harvester(tm) (HARVESTERTM is a trademark of Solar One Solutions) Ground-Mount solar electric generator system. Press at: http://www.solarone.net/News/docs/pr040513.html http://www.solarone.net/News/

http://www.solarone.net/Products/harvester_ground.html

5-14-04 Worldwatch Study

Worldwatch is launching a new study, Mainstreaming Renewable Energy in the 21st Century. See announcement of May 19 event at: http://releases.usnewswire.com/GetRelease.asp?id=131-05132004

More press at:

http://pei.pennwellnet.com/articles/article_display.cfm?Section=ONART&Category=INDUS&PUBLICATION_ID=6&ARTICLE_ID=204633

5-14-04 GE in Germany

General Electric has big plans in Germany, especially in financial services, renewable energy, water purification, and airport security systems. Next month, GE will open its European research center in Garching near Munich. The 150 researchers in medical technology, renewable energy and plastics will do research for the entire company. Story at:

 $\frac{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\%7BB1311FCE-FBFB-11D2-B228-00105A9CAF88\%7D\&doc=\%7B71AB1879-4700-4ADF-9E10-6F77B8D1646A\%7D}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\%7BB1311FCE-FBFB-11D2-B228-00105A9CAF88\%7D\&doc=\%7B71AB1879-4700-4ADF-9E10-6F77B8D1646A\%7D}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\%7BB1311FCE-FBFB-11D2-B228-00105A9CAF88\%7D\&doc=\%7B71AB1879-4700-4ADF-9E10-6F77B8D1646A\%7D}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\%7BB1311FCE-FBFB-11D2-B228-00105A9CAF88\%7D\&doc=\%7B71AB1879-4700-4ADF-9E10-6F77B8D1646A\%7D}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub=\frac{1}{2}}{\text{http://www.faz.com/IN/INtemplates/eFAZ/docmain.a$

5-14-04 International Utility Efficiency Partnerships RFP

The recently released RFP at http://www.iuep.org/ is for developing and implementing international energy efficiency projects that will result in the reduction, mitigation or sequestration of greenhouse gases. [Highlighted in GVEP Newsletter, GVEP: http://www.gvep.org/]

5-14-04 Tour de Sol

The Northeast Sustainable Energy Association's 16th annual Tour de Sol: The Great American Green Transportation Festival is coming up. Press at:

http://www.democratandchronicle.com/news/05134S482GS_news.shtml http://www.nesea.org/transportation/tour/

5-14-04 India, Mithradham's 5 Years of Service (George Peter)

Mithradham, a solar educational institution in India, completed 5 years of service in promoting environmentally friendly practices and renewable energy, thanks to PV. No power failures were experienced over 5 monsoon seasons. http://www.mithradham.org/

5-13-04 U.K., Romag's Solar Glass / Marley Roofing

Romag is using its laminating skills to incorporate PV cells provided by BP's solar energy division into glass panels. London architects will gather at the Royal Opera House for the launch of the product. At the same event, Marley Roofing will launch its solar-powered roof tiles for the domestic market. The tiles will be made of Romag's laminated glass and also incorporate BP solar cells. Story through Solarbuzz http://www.solarbuzz.com/index.asp

http://search.ft.com/search/article.html?id=040512000220&query=romag&vsc_appId=totalSearch &state=Form

More on Romag's PowerGlaz

Production is due to start at the company's expanded manufacturing facility at Leadgate industrial estate later this month, with the production line capable of turning out more than 7,000 panels a year. The panels are custom-built to architects' specifications and can measure up to 3.3m by 2.2m and produce almost 1-kW each. Story at:

http://icnewcastle.icnetwork.co.uk/0500business/0100local/tm_objectid=14236372%26method=full%26siteid=50081%26headline=glassmaker%2dpowers%2dup%2dfor%2d%2dpound%2d7m%2dsales-name_page.html

5-13-04 Toyota Motor Sales Solar Electric System

The solar electric system, designed and installed by PowerLight Corporation, at the headquarters of Toyota Motor Sales USA, Inc. in Torrance, California, is greatly exceeding energy performance expectations. In the first year of operation, the system has operated with 100% availability and has produced over 100% of expected energy. Story at:

http://biz.yahoo.com/bw/040512/125843 1.html

Coverage and photo at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR375.htm

Toyota: http://www.toyota.com/index3.html
PowerLight: http://www.toyota.com/index3.html

5-13-04 Republic, Washington Solar Plant and Power Systems

According to this article, RWE Schott Solar Inc. is thinking about building a small manufacturing plant for solar panels in this area. The proposed assembly plant is part of a plan to create a statewide market for solar panels to boost Washington's position as a leader in the solar industry. Story at:

http://www.hoovers.com/free/news/detail.xhtml?ArticleID=NR200405121180.3_af0f0064912e7bce

Also, a Republic-based utility district is offering solar power systems to customers in isolated04 areas where it costs too much to extend conventional electric lines. For a monthly payment, the

PUD will deliver a complete solar setup. Story at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=51074139&ID=cnniw&scategory=Energy%3AAlternative&

5-13-04 More on New York's "Solaire"

PV panels run the entire height of the 27-story structure and also cover the glass canopy over the entrance and sections of the roof. Story and photos at:

http://www.azcentral.com/home/design/articles/0513highrise13-CR.html

5-13-04 19th European Photovoltaic Solar Energy Conference and Exhibition

For the latest on the conference, 7-11 June 2004, in Paris, see: http://www.photovoltaic-conference.com/exhibition.htm

5-13-04 More on Science.gov 2.0

Science.gov -- the gateway to reliable information about science and technology across federal government agencies -- is made possible thrrough a collaboration of 12 major science agencies. Version 2.0 will search 47 million pages of government R&D results and present the results in relevancy-ranked order. Information at:

http://www.energy.gov/engine/content.do?PUBLIC_ID=15863&BT_CODE=PR_PRESSRELEASE_ S&TT_CODE=PRESSRELEASE

http://www.science.gov/

5-13-04 Xantrex Financial Results

First quarter financial results for Xantrex Technology Inc. are covered in the article at: http://biz.yahoo.com/prnews/040512/to056 1.html

5-13-04 More on Miasolé

Additional coverage of Miasolé's solar production, with photo, can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6717

5-13-04 Solar "Street Furniture"

Solarcentury has received a £75K grant to develop a range of solar powered street furniture products under the Knowledge Transfer Programme. The joint project between solarcentury and The University of Reading's Energy Group and Electronic Engineering Department will support evolution of the solar light solution already in the field. Information at solarcentury: http://www.solarcentury.co.uk/news/newsitem.jsp?newsid=382

5-13-04 India, Solar Lighting

Plans are in place to provide solar lamps to 7,952 households in 98 villages under the Union Ministry of Non-Conventional Energy Sources' program to electrify villages. Story through Solarbuzz http://www.solarbuzz.com/index.asp

at: http://www.e-pao.net/GP.asp?src=6.12.120504.may04

5-13-04 Selco Solar Light, India, announced its 150th solar lighting system installation for India's financial institutions in rural Karnataka. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6718

Selco: http://web.selco-intl.com:88/

5-13-04 Dye-sensitized Solar Cells

For those with a subscription to Nikkei Interactive: 5-12-04 "Bendable Dye-Sensitized Zinc Oxide Solar Cell Has 5% Efficiency", Nikkei Interactive 19:37

5-12-04 Miasolé Funding

Miasolé announced the closing of \$5.4 million in venture funding. Along with the funding, Miasolé announced new members of the Board of Directors. Miasolé, formerly Raycom Technologies, has developed a new low-cost manufacturing process for production of solar cells on flexible stainless steel foil. CIGS material and other thin-film layers are deposited in a continuous process in the vacuum system. Story at: http://www.prnewswire.com/cgi-

bin/stories.pl?ACCT=104&STORY=/www/story/05-11-2004/0002172121&EDATE=

Miasolé: http://www.miasole.com/http://www.miasole.com/solution.asp

5-12-04 SunWise Technologies Power Stations [Tina Nickerson, Laurie Dubois]

SunWise Technologies announced completion of a residential renewable energy project with the Navajo Tribal Utility Authority in Arizona. The NTUA implemented a renewable energy program to provide residents in remote locations with electric service at a reasonable cost. Sixty-three PV Power Stations were designed and supplied by SunWize. The 880-Watt SunWize(R) (SUNWIZE® is a registered trademark of SunWise Technologies) Power Stations use Shell Solar modules and Southwest Windpower wind turbines.

Coverage at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR374.htm

SunWize: http://www.sunwize.com/

Shell Solar:

http://www.shell.com/home/Framework?siteId=shellsolar&FC2=/shellsolar/html/iwgen/leftnavs/zzz_lhn1_0_0.html&FC3=/shellsolar/html/iwgen/welcome.html

5-12-04 California, San Francisco's "Energy Independence"

The San Francisco Board of Supervisors unanimously approved legislation to use the state's "Community Choice" law to switch San Francisco residents and businesses to a new power supplier for electricity service and to finance a network of renewable energy and energy conservation projects. The Energy Independence ordinance directs City departments to prepare an Implementation Plan and Request for Proposals for the Board to solicit new Electric Service Providers interested in building 360 MW of new PV installations, distributed generation, wind turbines, hydrogen energy efficiency, and conservation technologies. Story at: http://www.commondreams.org/news2004/0511-12.htm

5-12-04 More on Fuji Group

The Fuji Electric Holdings Co. group will begin shipping samples of solar batteries that make use of plastic film substrates. Group firm Fuji Electric Advanced Technology Co. will supply the amorphous silicon solar cells mainly to makers of construction materials, which may stretch them over steel plate for use as roofing material, for example. [Last item in news brief at: http://www.centreforenergy.com/displayNewsArticle.asp?From=BusinessMarkets&template=3,3&NewsID=1526743&ResultCategoryType=3,7&NewsPageID=3]

5-12-04 ARISE Technologies Funding

ARISE Technologies Corporation announced it has secured just over \$250,000 of funding through several transactions, which will require final TSX Venture Exchange approval. Information in ARISE Press May 11 at: http://www.arisetech.com/

5-12-04 Photon International May 2004

Contents of the latest issue of Photon International, and web access to a number of the articles - such as "First Modules from Photovoltech" and "Reverse Current Overload Tests for Modules in Europe" - can be found at: http://www.photon-magazine.com/photon/news issue 2004-05.htm

5-12-04 U.S., U.K. Renewables Partnerships

5-12-04 U.S. Energy Tax Provisions

The Senate approved S. 1637 (JOBS bill) last night, to which the energy tax package was attached. Attempts to delete the energy tax provisions from the bill failed. Now the bill goes to the House, which has not completed its version of the bill or decided whether or not to attach an energy tax package to it.

5-11-04 Canrom's Thin-film Activity

Per the Canrom Web site, Canrom is devoting its resources to the development of a thin-film CdTe-based solar electric module. This is a \$1,500,000 program supported in part by the New York State Energy Research and Development Authority. NYSERDA's web site lists a \$133,040 contract dated 2-4-04 with the objective to install and make operational manufacturing equipment at Canrom's new Niagara Falls manufacturing facility.

Canrom: http://www.canrom.com/aboutus/index.htm

5-11-04 lowa Thin Film Technologies in the News

Media coverage of Iowa Thin Film Technologies business activities can be found at: http://www.iowathinfilm.com/news/webpages/pedersen.htm
http://www.iowathinfilm.com/news/webpages/Ames%20Tribune.htm

5-11-04 Fuji Electric Group Solar Cells

This note came across the wires yesterday: "Fuji Elec Group to Ship Samples of Film Solar Cells", but further information was by subscription only. In 2003, the Fuji Electric Journal included an article on "Features and Prospects of Solar Cells Formed on a Film Substrate" by Tomoyoshi Kamoshita:

Abstract:

This paper describes the features, current status of development and prospects for solar cells formed on a film substrate. Use of a film substrate enables a roll-to-roll process to be used during manufacture, and this is a great advantage for mass production. Stabilized efficiency of over 8% was achieved during deposition of a photoelectric transfer layer at a rate of 30 nm/min. This result shows promise for mass production and practical use. Leveraging their features of light weight, flexibility and good appearance, solar cells have been integrated with roofing materials, and a product lineup of these roofing modules is introduced.

http://www.fujielectric.co.jp/eng/company/tech/contents2003 07.html

Fuji Electric R&D: http://www.fujielectric.co.jp/eng/company/tech/contents1.html

5-11-04 David Garman's Hearing Testimony

David Garman's prepared testimony at the Senate Energy & Natural Resources Committee hearing 27 April on sustainable, low emission, electricity generation - including a section on solar - is now available at: http://www.eere.energy.gov/office_eere/congressional_test_042704.html

5-11-04 California, Solar-powered Boat Competition

Twenty-two southland high school teams are competing in a solar-powered boat competition 21-

23 May 2004 at Lake Skinner reservoir and recreation area. The Solar Cup is a competition for public and private high school students throughout Southern California sponsored by Metropolitan Water District and its member cities and water agencies. Information at: http://biz.yahoo.com/bw/040510/106017 1.html

5-11-04 Desert Vista Solar Boat

Desert Vista High School's solar-powered boat took 1st place for best mechanically designed craft in the Salt River Project's Solar Spectacular held at Tempe Town Lake. Story at: http://www.ahwatukee.com/afn/education/articles/040512e.html

5-11-04 Solar Car Project with Xantrex Power Supply

A Xantrex XFR Series programmable power supply is part of fine-tuning the McMaster University Solar Car Project team's electronics on the Fireball II solar car. The first race with the car is the Formula Sun Grand Prix that takes place 19-21 May 2004 in Topeka, Kansas. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6702

5-11-04 Solar Today May/June 2004

See http://www.solartoday.org/current issue.htm for contents of the latest issue of Solar Today, including an article about rooftop solar panels that power Durango, Colorado's community arts center.

5-11-04 China, UK Renewables Partnership

China and the UK issued a joint statement for cooperation on areas that include renewable energy developments. Story at SolarAccess, including a copy of the joint statement: http://www.solaraccess.com/news/story?storyid=6712

5-11-04 U.S. Energy Tax Package

Coverage of the latest on the energy tax package provisions, which are attached to S. 1637 - the corporate tax bill, can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6707

A cloture vote on 1637 might take place today.

5-11-04 Science.gov 2.0 Information Retrieval

Energy Secretary Spencer Abraham will launch "Science.gov 2.0", the next major step in government science information retrieval, at a ceremony today. Media Advisory at: http://www.energy.gov/engine/content.do?PUBLIC_ID=15840&BT_CODE=PR_MEDIAADVISORIES&TT_CODE=PRESSRELEASE

5-10-04 Solar Integrated Technologies Developments

Solar Integrated Technologies has finalized its Aim flotation, and has raised a little over GBP 11m that will be used to expand into Europe and to build a second plant in eastern Germany. Story through Solarbuzz http://www.solarbuzz.com/News/Corporate.asp

http://www.hoovers.com/free/news/detail.xhtml?ArticleID=NR20040508670.4_3a70000727d6c54e

5-10-04 Hawaii PV

A PV project originally conceived to be the largest in the islands at up to 3 MW has been downsized and re-sited. The Ewa Beach site was judged too remote from infrastructure, and

instead the Navy will put PV on the Hangar Building 54 at Ford Island. The 200 kW project could be expanded in the future. Several different types of solar cells will be used to gather test data, said Karl Stahlkopf, HECO vice president for renewable energy. Said Gary Jensen, director of the Mid-Pacific Branch of the Office of Naval Research, "We're interested in the possibility of using photovoltaic energy (solar power) to create hydrogen" and then storing hydrogen in fuel cells. Story at: http://starbulletin.com/2004/05/08/news/whatever.html

5-10-04 Greece, Renewable Energy

In his opening speech to the annual conference of the European Photovoltaic Industry Association, Greek Deputy Development Minister George Salagoudis said the government planned to provide incentives for the wider distribution of new technological applications like PV systems. Story at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=50860320&ID=cnniw&scategory=Energy%3AAlternative&

5-10-04 Global "Dimming"?

Called global or solar "dimming", some scientists are saying that thicker clouds and growing air pollution are causing much of the Earth's surface to receive 10-20% less sunlight than 50 years ago. Sample story at: http://www.freep.com/news/nw/global10_20040510.htm
The topic will be discussed at an international geophysical conference in Montreal later this month. See session titles at: http://www.agu.org/cgi-bin/sessionssm04?meeting=sm04&sec=A [Daryl Myers]

http://www.agu.org/meetings/sm04/

May 7: Additional Searchable Archives for NCPV Hotline Entries

To assist in searching for past NCPV Hotline entries, we have created several PDF summary files for 2004 at the NCPV Hotline Archive Web Site, http://www.nrel.gov/ncpv/hotline.html#latest. By clicking on 2004 under "Archived Issues", a PDF file will appear that can be searched by keyword in Acrobat. Links can be accessed by cut/paste or by going to the Monthly File in which the article appeared (the monthly files have live links, some of which do expire over time).

Also, the "2004 Monthly Index" provides monthly PDF files of general subject indices that can be scanned for topics and the dates the articles appeared, which can then be found in the archives of the articles.

5-7-04 Solar Cell Concept (April 2004)

Science Daily reports that University of California scientists working at Los Alamos National Laboratory have experimentally demonstrated a phenomenon in which semiconductor nanocrystals respond to photons by producing multiple electrons. A paper has been published in Physical Review. Story at: http://www.sciencedaily.com/releases/2004/05/040505065828.htm LANL: http://guantumdot.lanl.gov/

LANL Press: http://www.lanl.gov/worldview/news/releases/archive/04-040.shtml

5-7-04 DayStar Technologies Presentation

DayStar Technologies, Inc. announced it is scheduled to present at the National Investment Banking Association conference in Chicago in mid May. The event brings together institutional investors, brokers and investment bankers with public and pre-IPO companies. Story at: http://biz.yahoo.com/prnews/040507/sff003 1.html

5-7-04 U.S. Comprehensive Energy Bill Tax Provisions

Environment & Energy Daily (subscription, email: pubs@eenews.net) reports that a cloture petition has been filed on the corporate tax bill to which the \$13-billion energy tax package is

attached, which if it passes would force a final vote on the bill. Senator McCain is still expected to offer amendments to strike the energy tax language from the bill. Senator Allard's amendment earlier in the week added language authorizing tax-exempt green bonds. The debate in the Senate continues today, and probably at least into Monday.

5-7-04 Ireland Renewables

Dermot Ahern, Minister for Communications, Marine and Natural Resources has established a group involving key players in renewable energy to report back on developing and expanding energy from green sources. The first meeting of the Renewable Energy Group has been held. Story at: http://212.2.162.45/news/story.asp?j=103324512&p=yx33z5zy8&n=103325272

5-7-04 Additional Searchable Archives for NCPV Hotline Entries

To assist in searching for past NCPV Hotline entries, we have created several PDF summary files for 2004 at the NCPV Hotline Archive Web Site, http://www.nrel.gov/ncpv/hotline.html#latest. By clicking on 2004 under "Archived Issues", a PDF file will appear that can be searched by keyword in Acrobat. Links can be accessed by cut/paste or by going to the Monthly File in which the article appeared (the monthly files have live links, some of which do expire over time). Also, the "2004 Monthly Index" provides monthly PDF files of general subject indices that can be scanned for topics and the dates the articles appeared, which can then be found in the archives of the articles.

5-6-04 Universal Communication Systems European Project

Universal Communication Systems, Inc. subsidiary Millennium Electric T.O.U. Ltd announced that it has been approved for an award of euro 908,493 in a Consortium Agreement by the Commission for the European Community. The project includes several other European participants and will be coordinated by Millennium. The objective of the project is to further develop Millennium's brand of PV collectors and move in the direction of developing PV panels that can be integrated into any type of building. Story at:

http://biz.yahoo.com/prnews/040505/flw018 1.html

Universal Communication Systems: http://www.ucsy.com/

Millennium: http://www.millennium-electric-inc.com/

5-6-04 California, Sebastopol Solar Energy Projects

Solar Works is installing 126 solar panels at the Ives Pool house as part of the city's largest solar energy project. This is the 3rd major solar energy system installed in the city, moving toward to City Council goal to produce 1,000 kW of solar power on residential, commercial, and municipal buildings by the end of 2005. Story through Solarbuzz at:

http://www.pressdemocrat.com/local/news/06solar b1.html

5-6-04 More on RWE Schott's Solar Installation on Historical Building

Additional coverage of RWE Schott Solar's flat-roof solar electric system on the West End Hotel in Culver City, California, with photo, can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6673

RWE Schott Solar: http://www.rweschottsolar.us/

5-6-04 California, PowerLight PV System (Susan DeVico)

Mayor Len Augustine and the City of Vacaville dedicated the City's new 39-kW solar electric system furnished by PowerLight. Pacific Gas & Electric provided a \$152,757 rebate for the City's project through the self-generation incentive program. PowerLight press: http://www.powerlight.com/company/press-releases/index.shtml

5-6-04 More on the MIT Study on Emissions Reductions with Solar

Additional information on the MIT study can be found at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAGO170.htm

MIT press: http://lfee.mit.edu/news/item?news%5fitem%5fid=100075

The report is in final editing and should be posted in the near future [Stephen R. Connors, MIT].

5-6-04 Iran, Solar Power Plant

Deputy energy minister for energy affairs, Hamid Chitchian, said good progress has been made with respect to PV and solar thermal generators. He noted that the solar power plant of Shiraz is the first of its kind among developing countries. Press at:

http://www.tehrantimes.com/Description.asp?Da=5/6/2004&Cat=9&Num=30

5-6-04 Solar Battery Charger (April 2004)

Global Solar Energy has developed a lightweight, rucksack-portable solar recharger that incorporates the company's CIGS technology. According to the press, Global Solar Energy has recently built a large-area solar module with a 10.7% conversion efficiency. Story at: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=50763721&ID=cnniw&scategory=Energy%3AAlternative&

Global Solar Media: http://www.globalsolar.com/mediacenter/index.htm

5-5-04 Nanotubes for Better Solar Cells

Researchers at the Universities of Bologna, Trieste and Notre Dame have found a way to alter carbon nanotubes so they can separate electrical charge efficiently, which could lead to better solar cells. Story at: http://www.three-fives.com/WZ/III-Vs/competitive news/news/000032/show/

5-5-04 Amonix Unit Starts Operation at the University of Nevada Las Vegas (Mary Jane Hale)

NREL, the University of Nevada Las Vegas (UNLV), Amonix and Arizona Public Service (APS) have worked together to configure and install an Amonix 25 kW (five MegaModule[TM]) (MegaModuleTM is a trademark of the Ammonix Incorporated) Integrated High Concentration PV (IHCPV) unit at the UNLV Center for Energy Research Site. This project will compare the performance, reliability and operational requirements of an advanced generation IHCPV system with other solar concentrating technologies at the UNLV site, including a dish Stirling engine system and a PV dish-concentrating system. It will also allow the demonstration of a new technology ideally suited for the Southwest and a comparative technology base of reference for high-concentrator photovoltaic performance and life-cycle cost for future large-scale projects in Nevada and the Southwest. The Amonix IHCPV system was connected to the Nevada Power grid on March 19, 2004 has generated electricity every day since.

This project is an accomplishment resulting from a competitive NREL solicitation funded under the Nevada Southwest Energy Partnership. Additional information will appear through this link shortly: http://www.egr.unlv.edu/solar/about/news.html

5-5-04 Uni-Solar Ovonic Solar Cells for Air Force Satellite

United Solar Ovonic Corp. announced that it has been selected by the Air Force Research Laboratory in Kirtland AFB, New Mexico, to provide UNI-SOLAR(R) (UNI-SOLAR® is a registered trademark of the United Solar Ovonic Corp.) lightweight solar cells deposited on thin stainless steel to supply power to an experimental satellite. Uni-Solar Ovonic also has an option to provide additional UNI-SOLAR(R) ultra-lightweight cells deposited on polymer. Story at:

http://biz.vahoo.com/prnews/040505/dew021a 1.html

Uni-Solar: http://www.uni-solar.com/

5-5-04 USDA Renewable Energy Initiatives

Agriculture Secretary Ann M. Veneman announced the availability of about \$23 million in grants that will support development of renewable energy systems and promote energy efficiency improvements. The Renewable Energy Systems and Energy Efficiency Improvements program was created as part of the 2002 Farm Bill. For more information, see:

http://www.usda.gov/Newsroom/0182.04.html http://www.rurdev.usda.gov/

5-5-04 California, Historical Building's PV

RWE SCHOTT Solar Inc. has completed a flat-roof PV system on the West End Hotel in Culver City, meeting challenges posed by fire codes and regulations for buildings with historical designations. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR370.htm

5-5-04 Maryland, Solar Energy Incentive Program

Maryland officials enacted a solar energy grant program that will provide financial incentives to homeowners and businesses that install solar energy devices. Governor Robert L. Ehrlich, Jr. signed the legislation into law, and it will take effect January 1, 2005. More on this program at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO169.htm

5-5-04 New York Solar Energy Award

As a result of a settlement on a lawsuit filed under the Clean Air Act, New York State will receive \$2.1 million to install solar equipment on municipal buildings. The New York Energy Research & Development Authority will get \$300,000 to administer the program. The remaining \$1.8 million will be for new solar equipment throughout the state. Story at:

http://www.saratogian.com/site/news.cfm?BRD=1169&dept_id=17718&newsid=11442214&PAG=461&rfi=9

5-5-04 U.S., Science Funding

Fifty-five senators have urged Senate appropriators to increase the Department of Energy's Office of Science FY 05 budget by 10% over the request level. Forty Democrats and 15 Republications signed the letter. For more information, including the text of the letter see: http://energy.senate.gov/news/dem_release.cfm?id=220781

5-5-04 Australia, Science Funding

Plans for a solar energy research center based in Canberra have been rejected in the latest round of science funding. Stories at: http://www.abc.net.au/news/newsitems/s1100761.htm http://www.abc.net.au/news/newsitems/s1100726.htm

http://canberra.yourguide.com.au/detail.asp?class=news&subclass=local&category=general%20news&story_id=303960&y=2004&m=5

5-5-04 Renewable Technology Forum/Demo

Today, the U.S. DOE and National Renewable Energy Laboratory are hosting a renewable technology forum/demo in Washington, DC. Topics being addressed include: "Strengthening the Rural Economy through Renewable Energy," "The Changing Built Environment," "New Choices for Electricity Customers," and "Reducing our Dependence on Foreign Oil." Press at: http://www.energy.gov/engine/content.do?PUBLIC_ID=15788&BT_CODE=PR_MEDIAADVISORIES&TT_CODE=PRESSRELEASE

5-5-04 PV 2003 World Market Data (Paul Maycock)

The 2003 World Market Data charts from PV News, plus others, are available in electronic form (\$50). Charts include: World PV Production by Country or Region; Top Ten PV Companies; US

Production by Company; Japanese Production by Company; European Production by Company; Rest of World Production by Company; World Production by Technology; World Shipments by Application; and US Shipments by Application. See PV News May 2004 (subscription), Paul Maycock, pves@pvenergy.com.

5-5-04 Turkey, World Bank Loan for Renewable Energy

Turkey has an agreement for a loan of \$203.03 million from the World Bank to finance a "Renewable Energy Project". The loan will be provided over a period of 3 years under the Country Assistance Strategy. Story at:

http://www.turkishpress.com/turkishpress/news.asp?ID=19812

5-4-04 Spire Solar Module Manufacturing Inspection System

Spire Corporation announced that Spire Solar has introduced an automated solar cell string inspection system for module manufacturers. The automated inspection system tests each string for cell orientation, alignment, ribbon placement, chips, micro-cracks and solder joint quality. It was developed under Spire's Photovoltaic Manufacturing Research and Development program supported by the U.S. DOE. Story at: http://biz.yahoo.com/bw/040503/35768_1.html Spire Press: http://phx.corporate-ir.net/phoenix.zhtml?c=76421&p=IROL-SingleRelease&t=Regular&id=522194&

5-4-04 Proton Energy Solar/PEM Fuel Cell

Proton Energy Systems, Inc. announced the award of a \$499,000 Phase II contract to continue development on its regenerative solar/Proton Exchange Membrane fuel cell demonstration system for the Naval Air Warfare Center Weapons Division at China Lake, California. The goal of the project is to demonstrate grid independent constant power output using inherently intermittent renewable energy for stable, remote operation. Story at:

http://biz.yahoo.com/prnews/040503/cgm082 1.html

Proton Energy: http://www.protonenergy.com/

5-4-04 Evergreen Solar Quarter Results

Evergreen Solar, Inc. announced results for the first quarter 2004. Said Richard M. Feldt, President and Chief Executive Officer, "I am pleased with our first quarter results. We had record product revenues and made good progress on our capacity expansion. The Marlboro factory achieved a 4.5 MW per year run rate by the end of March, up from 3 MW at the end of 2003. We are on target to quadruple our manufacturing capacity by year-end, significantly increase revenues and substantially improve product gross margins." Evergreen press: http://www.corporate-ir.net/ireye/ir site.zhtml?ticker=ESLR&script=410&layout=-6&item id=522596

5-4-04 NEDO Grant Program

An April 19 announcement by Japan's New Energy and Industrial Technology Development Organization (NEDO) invites research teams to submit proposals for the FY 2004 International Joint Research Grant Program, from April 19 to June 18. Information at: http://www.nedo.go.jp/english/informations/160419/160419.html

5-4-04 American Solar Challenge

For a copy of the Spring 2004 newsletter, and other information on the American Solar Challenge, go to: http://www.americansolarchallenge.org/aboutasc/newsletter/index.html

5-4-04 Solar Decathlon House

For a story on the final destination of the University of Colorado's former winning Solar Decathlon

house, see: http://exp.decathlon, including information about 2005, is: http://www.eere.energy.gov/solar_decathlon/doe.html

5-4-04 U.K., Engineering and Physical Sciences Research Council PV ProjectsThe EPSRC is the UK Government's leading funding agency for research and training in engineering and physical sciences. For a listing of PV projects, go to the main site at:

engineering and physical sciences. For a listing of PV projects, go to the main site at: http://194.66.183.26/WEBSITE/Index.aspx, click on "Research Support", then "Grants on the Web", then "Current Grant Portfolio", then "Programme", and then "Search" (in the blue header at: http://194.66.183.26/WEBSITE/GOW/ListProgrammes.aspx) by typing in the word photovoltaic, and click on "GO". Or go directly to this last link listed above, and do the search for photovoltaic.

5-4-04 U.S. Energy Tax Policy

The Senate is debating the corporate tax bill (JOBS - S. 1637), which includes a \$13-billion energy tax package. Amendments are on tap to strike the energy tax provisions from the bill.

5-3-04 Sharp Ultra-thin Solar Cells (Osamu Ikki, RTS Corporation)

RTS Corporation's April newsletter (subscription) reports that Sharp is planning mass production of ultra-thin solar cells with 200 um thickness, aiming for efficient utilization of raw material and cost reduction for the solar cells. This and much more news by subscription in RTS Corporation's "PV Activities in Japan", Tokyo, Japan, email ikki@rts.pv.com, Fax: +81-3-3553-8954.

5-3-04 Grid-connected PV

According to Solarbuzz Inc.'s new report, 37 MW of grid-connected PV were installed in the U.S. last year, up from a market of only 2 MW in 1998. Said Criag Stevens, CEO of Solarbuzz Inc., "The grid connect market now accounts for 56% of the total US solar PV market installations. US customers' appetite for PV systems is keeping pace with customers in Germany and Japan." For more on this report, see Solarbuzz: http://www.solarbuzz.com/News/NewsNACO208.htm US Grid Connect PV Market Report: http://www.solarbuzz.com/USGridConnect2004.htm

5-3-04 Pennsylvania, Solar Plant

Solar Power Industries was established at the former Ebara Solar site, and John Easoz was named executive vice president for the local facility. Solar Power Industries' plant employs about 25, and the workforce is expected to grow. The company is producing 2 MW per year, and expects to triple production within 3 months, with production of 10 MW by the 3rd quarter of this year, and 25-30 MW by 2005. Story through Solarbuzz at: http://www.pittsburghlive.com/x/vallevindependent/news/s 191958.html

5-3-04 California, "Solar Homes" Bill

The Senate Housing Committee passed SB 1652, the "Solar Homes" bill which would requite builders of new developments of 25 homes or more to install PV systems on a minimum percentage of the new homes beginning 2006. More on this bill at SolarAccess: http://www.solaraccess.com/news/story?storyid=6654

5-3-04 Pennsylvania's Energy Harvest Grant Program

Environmental Protection Secretary Kathleen A. McGinty announced \$5 million will be available in the 2nd year of Pennsylvania's Energy Harvest grant program. Story at: http://biz.yahoo.com/prnews/040429/phth023 2.html

5-3-04 Coalition Supports Domestic Energy Supply and Infrastructure

Over 100 companies and national leaders called upon Senate leadership to take immediate action on the "JOBS" bill, emphasizing that the bill's provisions encouraging investment in domestic energy supply and infrastructure are critical to US economic recovery. Says the letter, "With every month that passes without passage of energy tax legislation, the energy industry faces continuing uncertainty and disincentives to investing in areas such as renewable energy, energy efficiency and new technologies." Senate Majority Leader Bill Frist announced that the bill will be on the Senate floor first off in May. Story at:

http://story.news.yahoo.com/news?tmpl=story&cid=669&ncid=669&e=3&u=/usnw/20040430/pl_u snw/investment in energy infrastructure is critically needed broad ranging coalition tells s enate leaders119 xml

5-3-04 California, SunPower Workshop

SunPower Corporation it will host a free public workshop on solar electricity for commercial and residential sites on Saturday, May 8 in San Jose. Speakers include Dr. Richard Swanson, Andy J. Black, and Kurt Newick. For information, see:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=2004_0503005346&newsLang=en_

5-3-04 Energy Policy

For an overview of Energy Policy in the 21st Century, American Scientist, see: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=50594222&ID=cnniw&scategory=Energy%3AAlternative&

APRIL

4-30-04 PowerLight Award

Cleantech Venture Network announced that PowerLight Corporation received its 2003 Cleantech Emerging Enterprise of the Year award. Press at: http://www.powerlight.com/company/press-releases/2004/04.28.04 PowerLightWinsCleanTechAward.shtml

Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6646

4-30-04 California, Rebate for Clean On-site PV Generation

Pacific Gas and Electric Company presented East Bay Municipal Utility with an \$877,680 rebate after the utility district recently installed 2 natural-gas-fired cogeneration systems and one solar electric system at 3 facilities. The 35-kW PV system qualified for a \$157,680 rebate and was installed by PowerLight Corporation and Marelich Mechanical using Shell Solar 75-Watt modules. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR369.htm

4-30-04 Rooftop PV

Northern Power Systems announced it has been hired to engineer, build, and commission an advanced solar-based power system for Artists for Humanity at their new EpiCenter facility in South Boston. The rooftop PV system will use ASE-300 PV modules. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6638

4-30-04 Universal Communication Systems Inc. Acquisition

Universal Communication Systems Inc. announced it has completed the purchase of the remaining 50% equity of Solar Style Limited from MCO Ltd. A new subsidiary, Solar Style Inc., has been formed. Story at: http://biz.yahoo.com/bw/040430/305362 1.html

Solar Style: http://www.solarstyleinc.com/

Universal Communications: http://www.ucsy.com/

4-30-04 More on Changing Leadership at SEIA

Additional coverage of the change in leadership at SEIA is at SolarAccess: http://www.solaraccess.com/news/story?storyid=6640

4-30-04 Hydrogen, Notice Inviting Grant Applications

A Federal Register Notice was posted April 27 for the Office Of Science Financial Assistance Program, Notice DE-FG01-04ER04-20, Basic Research for the Hydrogen Fuel Initiative, which includes solar hydrogen production. http://www.science.doe.gov/grants/Fr04-20.html

4-30-04 U.S. Comprehensive Energy Legislation

Yesterday, the Senate blocked attempts to attach energy legislation to the Internet Tax Bill.

4-30-04 More on Red Wine and Solar Cells

Additional coverage about red wine making solar cells better - the University of Toledo experiments - is at SolarAccess: http://www.solaraccess.com/news/story?storyid=6641

4-30-04 More on Stirling Energy Systems

Additional coverage of solar dish plans unveiled by Stirling Energy Systems at the North American Energy Summit can be found at:

http://www.centreforenergy.com/displayNewsArticle.asp?From=BusinessMarkets&template=3,3& NewsID=1468220&ResultCategoryType=3,7&NewsPageID=3

SES: http://www.stirlingenergy.com/news.asp?Type=stirling

4-30-04 Solar Trough Opportunity Notice

An opportunity notice for "A - USA Trough: Near-term Component Manufacturing" can be found at: http://www2.eps.gov/spg/DOE/NREL/NR/RCX%2D44440/listing.html

4-29-04 UK Thin-film Solar Cell Research

The University of Bath is among 6 universities and 7 companies in the UK that began a £4.5 million project this month to cut the cost of PV-generated electricity in half. The project will develop thin-film solar cells. It is funded by the Engineering and Physical Sciences Research Council and is called Photovoltaic Material for the 21st Century. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUTE12.htm

4-29-04 Nevada, Washoe Tribe Solar Energy

The Washoe Tribe is the first applicant approved to receive financial benefits from the Nevada Solar Energy Systems Demonstration. The PUC approved the tribe's application for financial assistance for installing a 7.5 kW PV system at the Washoe Environmental Protection Department. Story at: http://www.reviewjournal.com/lvrj_home/2004/Apr-29-Thu-2004/business/23767975.html

4-29-04 U.S. Comprehensive Energy Legislation

Senator Domenici is offering the slimmed-down version of the energy bill as an amendment to the Internet Tax bill that will be considered by this Senate this morning.

4-29-04 California, Schwarzenegger on Renewables

Governor Schwarzenegger asked state energy regulators to step up the pace in helping utilities enter long-term electricity contracts and buy more renewable energy. In a letter to the PUC President, Schwarzenegger said he'd like to see utilities getting 20% of their power from green sources by 2010 instead of 2017. More at: http://www.modbee.com/local/story/8502171p-9346730c.html

4-29-04 Sarnafil Inc. Award

Sarnafil Inc. received the National Roofing Contractors Association 2004 Exhibitor Excellence Award for Most Innovative New Product, Service, or Program. The award recognizes the role Sarnafil's EnergySmartRoof(R) (EnergySmartRoof® is a registered trademark of the Sarnafil Inc.) plays in the SR2001 Solar Electric Roofing System manufactured by Solar Integrated Technologies. Press at: http://www.solarintegrated.com/PR_Sarna_NRCA.html

4-29-04 Wales, More on the "Solar Wall"

More on the building-integrated sloping wall design, integrated into the roof structure, with Shell ST36 CIS thin-film panels, including photos, can be found at: http://www.jxj.com/magsandj/rew/2004_02/optic.html [Highlighted at PV-UK]

4-29-04 Inverters

An article on choosing the right inverter for grid-connected PV systems can be found at Renewable Energy World: http://www.jxj.com/magsandj/rew/2004_02/inverter.html [Highlighted at PV-UK]

4-29-04 Germany, Solar Cell Research

The solar energy research association has summarized the latest results from solar cell research in a conference transcript in German. See: http://www.FV-sonnenengie.de/publikationen/index.html [German]

4-28-04 Germany, Phonix SonnenStrom Solar Module

Phonix SonnenStrom is launching a new 200 and 205 Watt module, the ASE 200 GT-FT/TE. The monocrystalline cell module is the highest power made by solar cell manufacturer RWE Schott Solar. RWE Schott Solar is supplying the module to Phonix SonnenStrom on an exclusive basis.

Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPT19.htm

Phonix SonnenStrom AG: http://www.sonnenstromag.de/

4-28-04 XsunX Solar Electric Vision Glass

XsunX, Inc. announced it has developed working prototypes of its solar electric vision glass. The working models maintain a high degree of transparency allowing light to enter into buildings while allowing occupants to easily see out. Story at:

http://www.primezone.com/newsroom/newsreleases.mhtml?d=56527

XsunX: http://www.XsunX.com/

4-28-04 Konarka Patent Assets (Joe Romano)

Konarka Technologies, Inc., announced that it has acquired patent assets from Chalmers University of Technology related to Konarka's development of PV products. Konarka Press at: http://www.konarkatech.com/news_press_chalmers_unv.php

4-28-04 Solar Electric Power Anniversary

In April 1954, scientists from Bell Laboratories unveiled their silicon solar cell. The Solar Energy Industries Association is celebrating this golden anniversary by looking ahead to future roles of solar power over the next 50 years. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAGO167.htm

Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6618

SEIA: http://www.seia.org/

4-28-04 Additional Coverage of Scott Sklar's Appointment

Additional coverage of Scott Sklar's appointment as acting interim executive director of SEIA is at SolarAccess: http://www.solaraccess.com/news/story?storyid=6625

4-28-04 Solar Energy's Future

Says Bud Annan of Scottsdale, former director of solar energy at the U.S. DOE, "The California energy crisis has jump-started the solar energy business in Arizona. The market is so large, they've created 500 new businesses installing solar in the last two years (in California)." Story at through SolarAccess at: http://www.aztrib.com/index.php?sty=19912

4-28-04 Canada, Ontario RFQ

Ontario has issued an advance RFQ for 300 MW from green power. See Bill Eggertson's site at: http://www.renewables.ca/main/main.php and http://biz.yahoo.com/prnews/040428/to010 1.html RFP site: http://www.ontarioelectricityrfp.ca/

4-28-04 EU's World Leadership In Renewable Energy

According to this article, 3 leading environmental groups want the European Commission to put forward a new target for boosting the share of renewable energy used in Europe to 25% by 2020. Story at: http://www.panda.org/news-facts/newsroom/press-releases/news.cfm?uNewsID=12785

4-28-04 Greece, Let's Bet On the Sun

On the occasion of the European Photovoltaic Industry Association Annual General Meeting, a European conference "Let's bet on the sun" has been organized. The conference will focus on

the potential and perspectives of the Greek market for PV energy, and is organized by EPIA in cooperation with others including the Greek Centre for Renewable Energy Sources, Association of the Hellenic PV companies, European Renewable Energy Council, and German Energy Agency. May 7, 2004 in Athens. Contact Marie Latour, epia@epia.org. http://www.epia.org/04events/events.asp

4-28-04 More on Clean Technology Ventures (John Turner)

More coverage of clean technology ventures, including coverage of Nanosolar, can be found at the Denver Post at: http://www.denverpost.com/Stories/0,1413,36~33~2108109,00.html

4-28-04 American Solar Energy Society - Sunbeam eNewsletter The ASES eNewsletter Sunbeam is available at:

The current issue covers topics such as the Congressional Energy Caucus, Renewable Energy and the Job Market, and Solar/Renewable Success Stories.

4-28-04 Australian Renewable Energy Stamps (Craig Cox)

A special issue of 4 stamps illustrates renewable energy production in Australia. For more information, see:

http://www.auspost.com.au/philatelic/stamps/stampshop 2.asp?category id=375&product type=8

4-28-04 Senate Energy & Natural Resources Committee Hearing

Available testimony from the oversight hearing on sustainable, low-emission, electricity generation April 27 can be found at: http://energy.senate.gov/hearings/witnesslist.cfm?id=1129 Witnesses included David Garman, Ernie Moniz, Richard Smalley, and Francis Burke.

4-28-04 More on Solar Dishes

Additional coverage of Stirling Energy Systems Inc. and Schuff Steel Co. plans for solar generators can be found at: http://www.azcentral.com/business/articles/0428solar28.html

4-27-04 Glenn Hamer / Scott Sklar Appointments

First Solar announced that Glenn Hamer will join the company in a senior executive role effective May 1, 2004. Hamer has been the Executive Director of the Solar Energy Industries Association since January 2001. First Solar Press Release: http://www.firstsolar.com/company news.html Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6603

The SEIA Board appointed Scott Sklar as Acting Interim Executive Director to facilitate the selection of an Executive Director and to deal with any interim Association issues. [Scott Sklar]

4-27-04 Sharp PV Systems for Homebuilders

Sharp Electronics Corporation announced it has signed agreements with homebuilders Clarum Homes and William Lyon Homes, Inc. to supply solar energy systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR366.htm
Sharp: http://www.sharpUSA.com/solar/SolarLanding/0,2286,,00.html?

4-27-04 Connecticut, 20% Clean Energy by 2010

Connecticut Governor John Rowland signed an executive order calling on the state government to purchase 20% of its total electricity from clean, renewable energy by 2010. Rowland said the state would purchase half of its electricity from renewable sources by 2020 and all of its energy from renewable sources by 2050. Story at:

http://www.wastenews.com/headlines2.html?id=1083006418

4-27-04 Japan, Solar Power Generator

Japan's "largest solar power system" was completed Tuesday at a national science research center in Tsukuba, Ibaraki Prefecture. The solar panels cover 6,500 square meters, and can generate over 1,000 kW of electricity. The National Institute of Advanced Industrial Science and Technology will use the system to test and evaluate 4 kinds of materials for solar panels. Story through Solarbuzz at: http://home.kyodo.co.jp/all/display.jsp?an=20040427056%20

4-27-04 Clean Technology Investments

Says Martin Roscheisen, CEO of Nanosolar, "We're at the threshold of making solar electricity profitable ... We're being contacted all the time by investors." The company raised \$6.5M last year from U.S. Venture Partners, Benchmark Capital, and other investors. In 2003, investment in clean-technology ventures rose 8% to \$1.2 billion. Story at:

http://www.azcentral.com/arizonarepublic/business/articles/0427greenventures27.html

4-27-04 Solar Photo Voltaics Fast Growing

Research and Markets announced the addition of Solar Photo Voltaics 2003 Edition 1 to their selections. According to the article, solar photovoltaics, together with wind power, are the two fastest growing and most promising forms of renewable energy for electricity generation. Story at: http://www.tmcnet.com/usubmit/2004/Apr/1034982.htm

4-26-04 Glenn Hammer Appointment (Paula Vaughnn)

First Solar announced that Glenn Hamer will join the company in a senior executive role effective May 1, 2004. Hamer has been the Executive Director of the Solar Energy Industries Association since January 2001.

First Solar Press Release: http://www.firstsolar.com/company_news.html
Coverage at Solarbuzz: http://www.solarbuzz.com/news/NewsNACO206.htm

4-26-04 SEIA Newsletter:

In a letter to SEIA's Board, Executive Director Glenn Hamer announced his resignation as SEIA's Executive Director, pending selection of a qualified replacement. The SEIA Board will meet April 26 to begin the process of selecting a replacement. [Colin Murchie]

4-26-04 California, Request for Bid for 4 MW PV and DG

The Department of General Services and the California Power Authority released a Request for Proposal for the California State Facility Solar Power Purchase Program. It is seeking to contract for about 4 MW of private-party-owned on-site solar electric systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR365.htm

4-26-04 USDA Grants & Loans

More information and news on the USDA's Farm Bill funding for renewable energy will be accessible from: http://www.rurdev.usda.gov/rbs/farmbill/register.html [highlighted in SEIA Newsletter, Colin Murchie]

4-26-04 Interstate Renewable Energy Council (Jane Pulaski)

For information on topics from Million Solar Roofs, to zero energy homes, to interconnection standards, see the IREC newsletter at: http://irecusa.org/

4-26-04 India, Ministry of Non-Conventional Energy Sources Applications for BVIP Contractors (E.V.R. Sastry)

The Ministry of Non-Conventional Energy Sources in India has issued a notice inviting

applications for pre-qualification of contractors for the supply and installation of BIPV systems in 6 buildings of the Sardar Swaran Singh National Institute of Renewable Energy near the city of Jalandhar in the Indian state of Punjab. The deadline is May 31, 2004. See the notice at: http://mnes.nic.in/tender_notice/prequalification.doc

4-26-04 Nigeria, Solar Electrification

Jigawa Alternative Energy Trust fund, with the U.S. DOE and U.S. AID, is dedicating a solar electric project in Jigawa State. The project is a result of a \$600,000 solar rural electrification and water-pumping project for 3 villages in Jigawa State. Story through Solarbuzz at: http://www.thisdayonline.com/news/20040423news38.html

4-26-04 More on solarcentury's New Roof Tile

Coverage of solarcentury's new PV roof tile, C21, with photo can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6600 solarcentury: http://www.solarcentury.co.uk/

4-26-04 U.S. Senate Energy & Natural Resource Committee Hearing

The hearing on April 27 will cover sustainable, low-emission electricity generation including renewable energy. Witnesses include Richard Smalley, David Garman, Ernie Moniz, and Francis Burke.

U.S. Department of Energy National Center for Photovoltaics

4-23-04 Sharp Modules

On June 1, Sharp Corporation will launch a new solar module designed to reduce the glare of sunlight and increase output. And, on July 1, the company will launch another module with a 14.8% efficiency for smaller PV roof systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPT25.htm

4-23-04 Evergreen Solar Manufacturing Capacity

Evergreen Solar, Inc., announced it has doubled its manufacturing capacity over 2003. The factory now has a capacity of 6 MW per year, up from the 3-MW capacity of Line 1. Information at: http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=ESLR&script=410&layout=-6&item_id=518538

4-23-04 BP Solar Panel System at Whole Foods

Whole Foods Market dedicated its newly installed BP Solar Panel System in Edgewater, New Jersey, as part of Earth Day 2004. Whole Foods Market partnered with BP Solar, Sun Edison, and A-Net Energy on the commercial-scale system. The 120-kW solar array covers 14,000 square feet on the roof of the store. Stories at Solarbuzz and SolarAccess:

http://www.solarbuzz.com/News/NewsNAPR364.htm

http://www.solaraccess.com/news/story?storyid=6572

BP Solar: http://www.bpsolar.com/DisplayNews.cfm?id=80

4-23-04 Xantrex and Sunslates

Xantrex Technology and Atlantis Energy Systems have formed an alliance under which Xantrex's Sun Tie XR Grid tie inverter and Atlantis' Sunslates PV roofing will be offered as a single package in a national program. Story at: http://www.builderonline.com/article-builder.asp?channelID=55\inftyionID=13\&articleID=50807

4-23-04 Uni-Solar PV System in Sacramento

A Habitat for Humanity home near Sacramento now has a UNI-SOLAR(R) (UNI-SOLAR® is a registered trademark of the United Solar Ovonic Corporation) PV system through a project coordinated in response to Governor Schwarzenegger's solar initiative to increase the use of residential solar energy throughout California. Other PV projects are underway with Habitat for Humanity and home developers throughout the State. Story at: http://biz.yahoo.com/prnews/040422/lath140 1.html

4-23-04 Mauritius Renewable Energy

Mauritius wants to develop local sources of energy, the deputy prime minister said on Thursday. Said Pravind Jugnauth, Mauritius plans to generate electricity from wind energy, solar energy and biomass. Story at:

http://www.reuters.com/locales/c_newsArticle.jsp?type=businessNews&localeKey=en_IN&storyID =4910563

4-23-04 Dish Stirling Developments

April 27 in Phoenix, Arizona, a "productionized" 25-kW unit, along with a new manufacturing facility to mass-produce the dishes will be unveiled. The development stems from a partnership between Stirling Energy Systems and Schuff Steel. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6589 Stirling Energy Systems: http://www.stirlingenergy.com/ Schuff International: http://www.schuff.com/index.html

4-22-04 Earth Day: http://earthday.envirolink.org/

4-22-04 DayStar Technologies Communications

DayStar Technologies, Inc. announced it has engaged Elite Financial Communications Group, LLC to launch a comprehensive marketing campaign to increase investor awareness and market support among individual and professional investors, industry and securities analysts and media professionals. Said John Tuttle, Chairman and CEO of DayStar, "DayStar looks forward to working with Elite to help communicate the role that Photovoltaics and DayStar will play in revolutionizing the energy industry." Story at: http://biz.yahoo.com/prnews/040422/sfth044 1.html

4-22-04 More Coverage on Konarka's Polymer-based PV

Konarka Technologies, Inc. has created prototype dye-sensitized PV cells that have efficiencies of nearly 8%, and has developed a manufacturing process that uses coating equipment and plastic substrate, cutting production costs for its PV cells. Konarka recently broadened its PV technology platform by licensing DuPont Electronic & Communication Technologies intellectual property related to the integrated use of dye-sensitized and polymer materials for PV cell development. More on this technology at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=50166217&ID=cnniw&scategory=Energy%3AAlternative&

4-22-04 Solar Cell Advances

An article in The Santa Fe New Mexican covers work by Los Alamos National Laboratory physicists Victor Klimov and Richard Schaller regarding research for a prototype solar cell. Story at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=50134731&ID=cnniw&scategory=Energy%3AAlternative&

4-22-04 PV Concentrators

Photon International April 2004 carries an article titled "PV concentrators: Many suns make light work" by Bob McConnell. McConnell chaired the International Solar Concentrator Conference held in Australia. Anyone interested in a copy of the Australian concentrator conference presentations on CD ROM can contact Bob McConnell at NREL Bob_McConnell@nrel.gov; the publication is listed as NREL/CD-520-35349, January 2004.

Photon International (specific article link not live): http://www.photon-

magazine.com/photon/news issue 2004-04.htm

4-22-04 California, Solar Forum

A California Solar Center - Solar Forum is scheduled for 5 May in San Francisco. It is open to all parties interested in learning about current issues regarding solar energy policy in California, and offers networking opportunities. More at: http://www.californiasolarcenter.org/reg_forum-may2004.html

4-22-04 California, Sun Power

Oroville Mayor Gordon Andoe is celebrating Earth Day by dedicating 5 solar energy systems for the City of Oroville; he proclaimed Oroville "Solar City USA" on Earth Day last year. A 1.2 MW system currently under construction at the Butte County Center will go on line in summer 2004, bringing installed solar power to 2.6 MW. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR363.htm

Oroville's solar installations: http://www.solarcityusa.com/

Sun Power & Geothermal Energy: http://www.sunpowergeothermal.com/

4-22-04 U.K., New Generation of Solar Homes

The first installation of the new PV roof tile, C21, took place on a development of 6 new homes in Lincolnshire. According to the press, C21 roof integrated solar technology is being launched at Interbuild on 26 April and has been short-listed in the Best Exterior Product category at the Interbuild New Product Awards. Said Steff Wright, CEO, Gusto Construction, "We're excited to be pioneering this new product from solarcentury." Story at: http://www.solarcentury.co.uk/news/news/newsitem.jsp?newsid=378

4-22-04 Philippines, Solar Electrification in Remote Villages

Enrique Gallardo, manager for the Alliance for Mindanao Off-grid Renewable Energy (AMORE) Area 3 said that 13 former conflict-affected villages are undergoing solar electrification. Story through Solarbuzz at: http://www.mindanews.com/2004/04/20nws-energy.html

4-22-04 California, Hydrogen Highway

In the Hydrogen Highway plan unveiled by Governor Schwarzenegger, the governor's order commits California to a number of actions by 2010, such as: "Appropriate incentives will be provided to encourage the purchase of hydrogen-powered vehicles and to encourage the development of renewable sources of energy for hydrogen production." Story and link to the Executive Order at SolarAccess: http://www.solaraccess.com/news/story?storyid=6578

4-22-04 Hydrogen Conference (Emily Brown, SEIA)

"Hydrogen: A Clean Energy Choice", NHA's 15th Annual U.S. Hydrogen Conference and Hydrogen Expo USA, 26-29 April, will include a "Hydrogen Analysis Symposium", as well as a session on renewable hydrogen production. Agenda at: http://www.hydrogenconference.org/Agenda.pdf

4-22-04 California, Grid Alternatives

GRID Alternatives, a San Francisco-based nonprofit, aims to install solar systems at homes in San Mateo County, and do the same in San Francisco, Pleasanton, and elsewhere. Story at: http://www.gridalternatives.com/Stories/0,1413,87~11268~2100371,00.html GRID Alternatives: http://www.gridalternatives.org/

4-21-04 Shell Solar Power in Ohio

Shell Solar and one of its solar contractors, Third Sun Solar and Wind Power, announced completion of 2 PV panels at the Athens City-County Health Department in Ohio for critical backup power to the health department during emergency situations. Story at: http://biz.yahoo.com/prnews/040420/datu077 1.html

Coverage at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR361.htm

4-21-04 Proton Energy Systems Fueling Infrastructure for Hydrogen Highway

Proton Energy Systems, Inc. announced its intention to provide hydrogen generation and fueling technologies as key infrastructure components for California's new "Hydrogen Highway" and renewable energy economy. Said Chip Schroeder, President of Distributed Energy Systems, "When the electricity to run our hydrogen generators comes from solar, wind, or hydro power, a truly sustainable energy future can be achieved". Story at:

http://biz.yahoo.com/prnews/040420/cgtu052_1.html Proton Energy Systems: http://www.protonenergy.com/

4-21-04 Stuart Energy Systems Next Generation Hydrogen Station

Stuart Energy Systems Corporation unveiled its small Stuart Energy Station (SES), a configurable water electrolysis infrastructure solution that produces and delivers hydrogen. When tied to renewable sources of electricity, such as PV solar or wind power systems, the SES offers a completely zero-emission energy cycle. The small SES, unveiled at Governor Schwarzenneger's Hydrogen Highway announcement, is configured to operate directly from PV solar power, or from grid electricity, and is being demonstrated using Solar Integrated Technologies' solar canopy. Story at: http://biz.vahoo.com/bw/040420/205884 1.html

Stuart Energy: http://www.stuartenergy.com/

4-21-04 DOE Deployment Position

According to Platts Inside Energy (subscription), a top DOE official said that DOE's decision to hire a deployment czar for renewable and energy efficiency technologies (see posting in yesterdays NCPV Hotline) does not signify a commitment to focus more on commercial applications than on long-term R&D. [Platts Inside Energy, www.platts.com]

4-21-04 Arizona. Tucson Electric Power Program

Through the SunShare program, the power company, in conjunction with Greenwatts, is helping customers pay for their solar panels. Story at:

http://www.tucsoncitizen.com/index.php?page=business&story_id=042104a11_solarhome More coverage of Arizona activity at:

http://www.oaklandtribune.com/Stories/0,1413,82~10834~2097777,00.html

4-21-04 Magna Solar Power Delivery

Magna Solar Power, Inc. delivered a Xantrex 10-kW utility interactive inverter system to the Arizona Department of Emergency Services and Military Affairs. "The Xantrex inverter is an important asset for the Arizona National Guard's energy efficient program. It will, in combination with BP Solar photovoltaic modules, produce reliable electricity for years and allow more assets

to be deployed to direct mission requirements," said John Walker, Magna Solar's CEO. Story at: http://biz.yahoo.com/bw/040421/215492 1.html

4-21-04 Uni-Solar Ovonic and Solar Integrated Technologies Alliance

United Solar Ovonic LLC announced it has entered into an agreement with Solar Integrated Technologies to expand their alliance formed in January 2003. Under the agreement, SIT has certain exclusive rights to utilize UNI-SOLAR(R) (UNI-SOLAR® is a registered trademark of the United Solar Ovonic LLC) flexible solar electric laminates for integration with single-ply roofing membranes for commercial, institutional, and industrial buildings in North America. For more on this agreement, see: http://biz.yahoo.com/prnews/040421/dew005_1.html

Solar Integrated Technologies: http://www.solarintegrated.com/

Uni-Solar: http://www.uni-solar.com/

4-21-04 Life Cycle Analysis and Recycling of Solar Modules Proceedings (Arnulf Jaeger-Waldau)

The presentations and proceedings of the Workshop Life Cycle Analysis and Recycling of Solar Modules - the "Waste" Challenge in Brussels in March are available in the event section of the Scientific Technical Reference System on RE&EEE web page, http://streference.jrc.cec.eu.int/

4-21-04 Konarka Collaboration with Oak Ridge National Laboratory (Joe Romano)

Konarka Technologies, Inc., announced it is collaborating with Oak Ridge National Laboratory to further technology development for Konarka's PV products. Per the press release, Oak Ridge National Laboratory has selected Konarka as its exclusive partner for R&D of chemistry related to solar cells. Said Dr. Russell Guadiana, Vice President, Research & Development, Konarka Technologies, "We are working with Oak Ridge to develop technologies that will improve our manufacturing processes and lower the cost of our third-generation, flexible photovoltaic materials. Research is critical to any company developing commercial products. Konarka continues to expand its collaboration with world-renowned research teams to maximize its research and development efforts." [Joe Romano, Press Release] Konarka Press: http://www.konarkatech.com/news_press.php

4-21-04 California, SANYO North America Dedicates PV Systems

SANYO North America dedicated 2 new solar installations that generate 200 kW of electrical power for the company's new facilities in San Diego. The 2 arrays, a 150-kW PowerLight PowerGuard(R) (PowerGuard® is a registered trademark of the PowerLight Corporation) system on the roof of Sanyo's U.S. headquarters, and a 50-kW PowerLight PowerTracker(R) (PowerTracker® is a registered trademark of PowerLight Corporation) on the adjacent carport structure, were furnished by PowerLight Corporation using SANYO's frameless HIT-190 solar modules. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR362.htm

Sanyo: http://www.sanyo.com/home.cfm PowerLight: http://www.powerlight.com/

4-21-04 Low-emission Electricity Generation Hearing

The Senate's Energy & Natural Resources Committee holds a hearing on Sustainable, Lowemission Electricity Generation on April 27 at 10am. Witnesses to be announced.

4-20-04 California, Sharp Solar System Installation

Sharp Electronics Corporation announced a new 200 kW Sharp PV system installation at a multitenant office building in Santa Rosa, California. According to the announcement, the building represents Northern California's first "Zero Energy" commercial real estate complex. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR360.htm Sharp: http://www.sharpusa.com/solar/SolarLanding/0,2286,,00.html

4-20-04 Solar-Hydrogen House

The Solar-Hydrogen Eco-house, part of the Universiti Kebangsaan Malaysia new fuel cell and automotive research center, is self-sustainable and runs on hydrogen. The eco-house relies on a PV hydrogen production and storage system to power household appliances and a fuel cell. Story and photos at:

http://thestar.com.my/lifestyle/story.asp?file=/2004/4/20/features/7725984&sec=features

4-20-04 Universal Communication Systems Product Orders

Universal Communication Systems Inc. announced that its subsidiary Millennium Electric TOU Limited has received \$7M in current product orders, and expects over \$22M in additional orders in fiscal year 2004. More on their PV business and new markets at:

http://biz.yahoo.com/prnews/040420/fltu019 1.html

Universal Communication Systems: http://www.ucsy.com/

Millennium Electric TOU, Inc.: http://www.millennium-electric-inc.com/

4-20-04 Kaptur's Earth Day Announcements (Tom Surek)

Congresswoman Marcy Kaptur, Ohio, announced a series of alternative energy initiatives, including \$1M in research for on-demand Photovoltaic Hydrogen power at the University of Toledo. Said Kaptur, "We need an Apollo Project or Manhattan Project in ten years to make us energy independent ...". [hardcopy, Kaptur Press Release, April 19] Kaptur Web site: http://wwwc.house.gov/kaptur/default.asp

4-20-04 Arrowhead Research Corp's New Nanotech Subsidiary

Arrowhead Research Corporation announced that its newly formed nanotech subsidiary - Aonexx Technologies, Inc., -- has named Sean Olson as President. Aonexx Technologies was formed to commercialize a patented method for transferring nano-layers of semiconductor materials and oxides onto low-cost substrates with no adhesives and with controlled stress. Early applications are expected to include development of inexpensive laminate wafers, which are expected to reduce manufacturing costs and improve performance for devices such as LED's and high-efficiency solar cells. Information at: http://biz.yahoo.com/prnews/040420/cgtu017 1.html

4-20-04 WorldWater Shipment

WorldWater Corp. announced it will ship an additional \$1.3 M of PV equipment to the job site at Cerro Coso College in Ridgecrest, California. WorldWater is the exclusive PV supplier for the 1-MW project. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR359.htm WorldWater: http://www.worldwater.com/WW/wwpages/california.html#cerro

4-20-04 Solar Progress

An article on Solar Power - "Larger Projects Gain Ground As Technology Improves" - can be found in Engineering News-Record at:

http://www.enr.com/news/powerIndus/archives/040419.asp

4-20-04 Low-emission Electricity Generation Hearing

The Senate's Energy & Natural Resources Committee holds a hearing on Sustainable, Lowemission Electricity Generation on April 27 at 10am. Witnesses to be announced.

4-20-04 Energy Efficiency & Renewable Energy Deployment Job Posting

The U.S. DOE has posted a "Senior Executive Service Employment Opportunity" for "Director,

Regional Office and Deployment Operations" in the Office of the Assistant Secretary for Energy Efficiency and Renewable Energy, Deputy Assistant Secretary for Technology Development. The Director will be responsible for managing and directing programmatic and technical aspects of EERE's efforts to better focus and integrate the deployment of renewable energy and energy efficiency technologies. More information and requirements at:

http://jobsearch.usajobs.opm.gov/getjob.asp?JobID=21473545&AVSDM=2004%2D04%2D19+13 %3A56%3A39&Logo=0&col=dltc&cy=&brd=3876&lid=316&fn=&q=energy+efficiency+and+renew able+energy

Highlighted In Platts Inside Energy (subscription) www.platts.com

4-20-04 More on World's Largest PV Plant

More on the world's largest PV plant can be found in the press at: http://www.imonews-jornal.com/html/noticia.php?id=123 [Portugal press]

 $\underline{http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=49910108\&ID=cnniw\&scategory=En_ergy\%3AAlternative\&$

4-20-04 North American Energy Summit Recommendations (Bud Annan)

Recommendations from the North American Energy Summit, governors' statements, and other materials from the summit are available at the Western Governor's Association Web site at: http://www.westgov.org/wga/initiatives/energy/summit/index.htm

4-20-04 Governor Richardson's Commitment to Solar & Renewable Energy

At the North American Energy Summit in Albuquerque, Governor Richardson announced several initiatives. He signed an executive order declaring New Mexico as the "Clean Energy State", which creates the Clean Energy Development Council, he's supporting a goal of at least 10% of the state's energy coming from renewable sources by 2010, he's supporting the effort to develop a new solar panel assembly facility in Taos, and has announced further details of the Solar Power Task Force. The Energy, Minerals & Natural Resources Department will take the lead in creating the task force, which will develop a proposal for a large solar electric facility in New Mexico by the end of the year. [New Mexico Governor's Office, Marsha L. Catron]

4-20-04 Governor Richardson on Concentrating Solar

In the keynote address delivered at the North American Energy Summit last week, Governor Richardson says, "Here in New Mexico I have told our energy planners that we want a proposal for a concentrating solar plant designed and ready to fund by late this year." http://www.governor.state.nm.us/speeches.html

4-19-04 Portugal, World's Largest Solar Energy Plant

The General Directorate of Energy plans to install more than 100 hectares of solar panels with a total production capacity of 64 MW. BP Solar Espana will be in charge of installation. A unit for the manufacture and installation of PV modules is being built. Story at: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=49910108&ID=cnniw&scategory=Energy%3AAlternative&

4-19-04 Venture Capital Going Green

With over euro 50 million already invested in 2004, European venture capital firms are showing increased interest for "Cleantech", or renewable-energy startups. Story at: http://www.tornado-insider.com/news/Article.asp?id=13280

4-19-04 U.S. DOE PV System Installation Accreditation and Certification Program

The U.S. DOE's Funding Opportunity titled National Accreditation and Certification Program For

Installation and Acceptance of Photovoltaic Systems, with an application due date of June 5, 2004, can be found at: https://e-

<u>center.doe.gov/iips/faopor.nsf/8373d2fc6d83b66685256452007963f5/8f2cc18e1763189485256e76005dfd42?OpenDocument</u>

4-19-04 Michigan, Calvin College Building LEED Gold Rating

A large PV array on the building's roof is the outcome of a student proposal and resulting \$91,000 grant provided by the Energy Office of the State of Michigan, and will provide 60% of the building's power. Story through Solarbuzz at:

http://www.calvin.edu/news/releases/2003 04/bunker center.htm

4-19-04 More on Origin's "Sliver" Technology

A \$20-million solar energy manufacturing plant to be built in South Australia and opened by late next year will take advantage of a technology that uses 90% less silicon than conventional solar cells. Story at: http://www.theage.com.au/articles/2004/04/18/1082140125998.html

4-19-04 More on Siemens Organic PV

Additional coverage of Siemens organic solar cells can be found at: http://www.german-renewable-

energy.com/www/main.php?tplid=6&aktuell_id=15&PHPSESSID=383a0ccb1a476a093c19b66f3c416f5e

4-19-04 Western Renewable Energy Generation Information System

Information on WREGIS can be found at the Western Governor's Association Website: http://www.westgov.org/wieb/wregis/

4-19-04 SunWize Technologies Sales Manager

SunWize Technologies announced that Mark Paddison joined the sales team as Sales Manager for Canada to service renewable energy dealers. Press at Solarbuzz:

http://www.solarbuzz.com/news/NewsNACO203.htm

SunWize Technologies: http://www.sunwize.com/

4-19-04 Low-emission Electricity Generation Hearing

The Senate's Energy & Natural Resources Committee holds a hearing on Sustainable, Lowemission Electricity Generation on April 27 at 10am. Witnesses not announced yet.

4-19-04 Office of Management and Budget, Scientific Peer Review Process

The Office of Management and Budget released a revised draft of guidance to agencies, and requested additional public comment on the appropriate use of peer review, as part of a "continuing effort to enhance the quality and credibility of scientific information that is disseminated to the public". Information at: http://www.whitehouse.gov/omb/pubpress/

4-19-04 Voltaix, Inc. Strained Silicon and Silicon Germanium Technologies

Voltaix, Inc., has expanded its manufacturing facilities for a new product that offers ease in control of SiGe or SiGe:C layer composition, greater uniformity of Si, SiGe and SiN layers, and deposition of very thin, smooth films on all surfaces of importance in semiconductor devices. More at: <a href="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/04-16-2004/0002153270&EDATE="http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=104&STORY=/www.prnewswire.pl?ACCT=/www.prnewswire.pl?ACCT=/www.pr

Voltaix: http://www.voltaix.com/

4-19-04 Thailand Solar Home System

The Provincial Electricity Authority has initiated a project called the "Solar Home System" to provide free solar panels. Story at:

http://203.150.224.53/page.news.php3?clid=20&id=112072&usrsess=1

4-16-04 Solar Panel Manufacturing and Solar Electricity Production Project (New Energy Capital)

At the Financing the Future of Energy workshop at the North American Energy Summit, 4 companies announced the signing of an agreement to locally manufacture solar panels and generate solar electricity in the rural communities of northern New Mexico. The companies are Kit Carson Electric Cooperative, SolarPort, Spire Corporation, and New Energy Capital. Said Governor Richardson of New Mexico, "We are pleased that this Northern New Mexico solar project brings renewable energy and opportunities for economic development to the communities of northern New Mexico." See attached press release below.

Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6535

Coverage through Solarbuzz:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=49868571&ID=cnniw&scategory=Energy%3AAlternative&

Other press:

http://www.rockymountainnews.com/drmn/business/article/0,1299,DRMN_4_2809367,00.html http://www.santafenewmexican.com/main.asp?SectionID=2&SubSectionID=7&ArticleID=43464

New Energy Capital: http://www.newenergycapital.com/

SPIRE: http://www.solaraccess.com/marketplace/compdetail?compid=1902

Kit Carson: http://www.kitcarson.com/ SolarPort: http://www.solarport.net/

4-16-04 Western Renewable Energy Generation System

Governor Richardson of New Mexico announced that the Information System for the West will track and verify the generation of renewable energy by state and company, and would be in place by 2005. Story at:

http://www.rockymountainnews.com/drmn/business/article/0,1299,DRMN 4 2812529,00.html

4-16-04 California State University PV Rebate

Cal State Hayward accepted a check for more than \$3.4 million from Pacific Gas & Electric for installing a solar electric system estimated to generate 1.45 million kWh a year. PowerLight installed the 1.05 MW PV system. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR358.htm

PowerLight: http://www.powerlight.com/

4-16-04 China Solar Cell Production

Mainland China will enter the top 5 rankings of countries with the largest output of solar cells next year according to the market-research firm Beijing MOne Inc. Total capacity doubled to 30 MW last year, and the forecast is to double to 60 MW this year. Story at:

http://www.electroniccomponents.globalsources.com/am/article_id/900000051349/page/showart_icle?action=GetArticle_

4-16-04 Renewable Energy & Energy Efficiency Expo & Ice Cream Social (Ken Bossong)

The 7th Annual Congressional Renewable Energy and Energy Efficiency Caucus will bring together more than 50 companies from across the U.S. representing more than 2 dozen renewable energy and energy efficiency technologies. The Expo is co-sponsored by the members of the Sustainable Energy Coalition and the House and Senate Renewable Energy and Energy

Efficiency Causes: Tuesday, June 8, 2004, 10 am-5 pm, Caucus Room, Cannon House Office Building 1st St. & Independence Ave. S.E., Washington, D.C. Previous Expos have drawn an average of 3,000 visitors including Congressional members and their staff, Executive Branch officials, media, and general public. (Sustainable Energy Coalition press)

4-16-04 Berkeley Study - Renewables and Jobs (Christophe Inglin)

For a direct link to the Berkeley Renewables study, see: http://socrates.berkeley.edu/~rael/outreach.html

4-16-04 More on Solargenix in Chicago

Solargenix will receive a \$1.7 million loan from Chicago, to be repaid over 5 years. And the city and sister agencies agreed to buy \$5 million worth of solar thermal collectors to install over the next 3 years. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6531

4-15-04 Germany, Conergy Outlook

Conergy Group says they have transformed the company over the last year into a leading supplier of solar systems and components in Europe. According to the article, with about 30 MW of PV capacity, the company had a market share in Germany of significantly more than 20%. Also, at the end of November, solar-thermal production began at Landshut. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6528

Conergy press: http://www.conergy.de/international/presse/04 04 14.php

Conergy: http://www.conergy.de/international/

http://conergy.de/international/produkte/conergy 106lpro.php

April 16, 2004

Solar Panel Manufacturing and Solar Electricity Production Project Announced for Northern New Mexico

Press release, New Energy Capital; Carole Parker, Daniel Goldman:

Governor Bill Richardson endorses Northern New Mexico Solar Project at North American Energy Summit today

Albuquerque, NM, April 14, 2004 — At the Financing the Future of Energy workshop today at the North American Energy Summit, four companies announced the signing of an agreement to locally manufacture solar panels and generate solar electricity in the rural communities of northern New Mexico. The companies are Kit Carson Electric Cooperative and SolarPort, both of Taos, New Mexico, Spire Corporation of Bedford, Massachusetts, and New Energy Capital of Wellesley Hills, Massachusetts.

Governor Bill Richardson endorsed the project during an announcement of several energy initiatives at the workshop. "We are pleased that this Northern New Mexico solar project brings renewable energy and opportunities for economic development to the communities of northern New Mexico," Richardson said.

Under the agreement solar panels will be assembled at a Spire Corporation facility to be located in Taos and installed in various locations around northern New Mexico. New Mexico utilities, including Kit Carson, will purchase the solar-generated electricity. Spire recently developed a similar solar panel assembly plant in collaboration with the City of Chicago, Commonwealth Edison (the local utility), and the State of Illinois.

The agreement announced today will also help New Mexico utilities meet a new State requirement, known as the Renewable Portfolio Standard (RPS), to purchase more electricity from renewable energy sources. The Parties also agreed to support the creation of PowerTaos! — an education, public awareness and marketing campaign to increase the use of solar energy and encourage involvement by local, State and federal agencies, local businesses, non-profit organizations, national laboratories, and the utility customers of northern New Mexico.

The project is expected to create initially about 30 jobs in solar panel assembly, installation and related work. The prospects for additional jobs are significant as New Mexico utilities buy increasing amounts of renewable energy pursuant to the state RPS and the extra credit provided for solar power under the new law.

Dan Reicher, President of New Energy Capital said, "We are excited by the momentum we see in New Mexico for solar energy, and by Governor Richardson's leadership in bringing rural communities, utilities and entrepreneurs together to realize the benefits of solar energy in the state." Reicher was formerly Assistant Secretary of Energy for Energy Efficiency and Renewable Energy at the U.S. Department of Energy. New Energy Capital finances, owns and operates renewable energy and distributed generation projects.

Roger G. Little, President & CEO of Spire said, "We're excited to be working in Taos. We see this as a logical next step to bring to New Mexico some of the clean energy and economic benefits we're seeing in Chicago." Spire Corporation (NASDAQ:SPIR) is the world's leading supplier of solar module manufacturing equipment, providing equipment to more than 150 facilities in 42 countries worldwide.

Joel Goldblatt, SolarPort's Manager and Co-Founder said, "SolarPort is a new, renewable energy provider: we're at the right place, at the right time for solar energy in New Mexico. In support of Governor Richardson's call to make New Mexico 'The Clean Energy State', we look forward to launching the PowerTaos! Campaign."

SolarPort uses solar power generation and distribution, co-located with energy-efficient greenhouses, to involve local entrepreneurs, create new jobs, and promote education and commerce centered around making, selling and using solar electricity in the community.

Kit Carson is a rural electric cooperative serving Taos and two surrounding counties in northern New Mexico. Luis Reyes, Kit Carson CEO said, "Kit Carson is ready to lead the rural electric cooperatives with this project, to bring clean, renewable solar electricity into the homes and businesses of our members, and create a new surge of exciting economic development for northern New Mexico."

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Northern New Mexico Solar Energy Production Project

Contacts:

Luis Reyes, CEO Kit Carson Electric Cooperative www.kitcarson.com 505-758-2258 Dan Reicher, President New Energy Capital www.newenergycapital.com 802-496-3529

Roger G. Little, Chief Executive Officer Spire Corporation www.spirecorp.com 781-275-6000

Joel Goldblatt, Manager SolarPort Holdings, LLC www.solarport.net 505-776-2683

4-15-04 PowerLight Media Coverage

An article from Architectural Record, leading with, "In the U.S., Architects are Ramping up the Design Power of Photovoltaics," can be found at:

http://www.powerlight.com/company/media/2004/04.01.04 ARCHITECTURALRECORD Design PowerofPV.shtml

Also, coverage of the founding and growth of PowerLight can be found at http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2004/04/13/BAGK662MB417.DTL Said Tom Dinwoodie, "The technology is inevitable. It's happening. This industry is growing as fast as an industry can grow right now."

4-15-04 Eastwood Energy Corporation PV Mounting System

Eastwood Energy Corporation has developed a flexible, proprietary, modular mounting system for solar electric systems focusing on designs that are non-invasive and applicable to flat or contoured roofs, as well as facilitate cooling of PV modules. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR357.htm Eastwood Energy: http://www.eastwoodenergy.com/

4-15-04 AEC Letter of Intent

Alternate Energy Corporation has signed a letter of intent to acquire a majority interest in Sterling Technologies, Inc., a subsidiary of Sterling Planet that deploys distributed generation technologies, primarily solar, through utilities and state-supported green energy programs. Information at: http://www.energyinfosource.com/aoi/news-details.cfm?id=21526&FLink=

4-15-04 Richardson and Schwarzenegger on Renewables

Governors Bill Richardson and Arnold Schwarzenegger promoted renewable energy in a letter to energy and government officials planning to attend the North American Energy Summit this week.

Story at: http://www.abgjournal.com/news/state/apnrq04-14-04.htm

Additional coverage of the events at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAGO166.htm and

http://www.theolympian.com/home/news/20040415/business/27572.shtml

http://abcnews.go.com/wire/US/ap20040415 384.html

http://www.thenewmexicochannel.com/news/3006947/detail.html

4-15-04 More on Kyocera Residential Solar Power Generation Systems

Kyocera press on the April 2004 release of the newly developed residential solar power

generation systems, including "attaining the world's greatest module conversion efficiency in multicrystal silicon solar cells," can be found at: http://global.kyocera.com/news/2004/0306.html

4-15-04 More on Renewables, Jobs, and the Apollo Alliance

Additional coverage of the Berkeley study on renewables and jobs, and the Apollo Alliance, can be found at: http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2004/04/14/BUGNG64K1E1.DTL
Apollo Alliance: http://www.apolloalliance.org/

4-15-04 Regional Conference of Renewable Energy

Nineteen Arab states together with the Comoros, Iran, and Germany are expected to participate in the Regional Conference of Renewable Energy (RCRE) for the Middle East and North Africa countries on 21-22 April in Yemen. More at:

http://www.sabanews.net/view.php?scope=f9129&dr=&ir=&id=66514

4-15-04 Solar Photo Voltaics 2003 Edition (Amy Cole, Research & Markets)

Information about this report published by ABS Energy Research can be found at: http://www.researchandmarkets.com/reports/c1282 (may need browser other than Explorer).

4-14-04 China's Renewable Energy Future

An overview of renewable energy events and potential in China can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6505

People's Daily coverage:

http://english.peopledaily.com.cn/200404/07/eng20040407 139735.shtml

4-14-04 Solar Car Project

For information on The Stanford Solar Car Project, and the team working on designing a new car for the 2005 American Solar Challenge, see:

http://daily.stanford.org/tempo?page=content&id=13740&repository=0001 article

4-14-04 Pacific Gas & Electric Incubator (Kevin Eber, EERE Network News)

As part of emerging from Chapter 11, PG&E will create a non-profit corporation to support research and investment in clean energy technology. Press at:

http://www.pge.com/news/news_releases/g2_2004/040412.html

EERE Network News:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D04%2D14%27%7D

4-14-04 Maryland Renewables

The Maryland General Assembly gave final approval to legislation that will bring significant amounts of renewable energy to the state. The bill requires that 7.5% of the state's electricity come from renewable sources by 2014. Story at:

http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=49768687&ID=cnniw&scategory=Energy%3AAlternative&

4-14-04 Sustainable Energy Technologies Executive

Sustainable Energy Technologies Ltd announced the appointment of A.F. (Abby) Badwi as director of the company. Story at: http://www2.ccnmatthews.com/scripts/ccn-release.pl?/current/0413061n.html

Sustainable Energy Technologies: http://www.SustainableEnergy.com/SET-home/index.html

4-14-04 Inverter UL Listing

SMA America Inc. announced a UL1741 listing for its Sunny Central 125 kW Utility Interactive Inverter. Story at: http://www.powerpulse.net/cgi-bin/displaystory_new.pl?id=10630 SMA: http://www.sma-america.com/index.asp

4-14-04 Ballard Power Converter

Ballard Power Systems introduced its 75 kW Ecostar(TM) (EcostarTM is a trademark of the Ballard Power Systems, Inc.) grid-tie power converter specifically designed for PV applications. Press at: http://www.ballard.com/scripts/ccn-release.pl?/current/0414032n.html
Ballard: http://www.ballard.com/

4-14-04 Union of Concerned Scientists EnergyNet (SEI Newsletter)

For information on USC's Clean Energy "EnergyNet", see: http://www.ucsusa.org/clean_energy/energynet/index.cfm SEI Web site: http://www.solarenergy.org/index.html

4-14-04 Renewable Energy and Jobs

According to a report released by the University of California, Berkeley, "Across a broad range of scenarios, the renewable energy sector generates more jobs per average megawatt of power installed and per unit of energy produced, than the fossil-fuel-based energy sector." Story at: http://sanfrancisco.bizjournals.com/sanfrancisco/stories/2004/04/12/daily17.html?jst=b_ln_hl Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6513

4-14-04 Daggett Solar Plant

The California Public Utilities Commission is scheduled on 22 April to discuss how to respond to a petition The Utility Reform Network filed requesting that the commission reconsider its December 2003 approval of plans for the plant. Story April 14 at: http://www.desertdispatch.com/cgi-bin/newspro/viewnews.cgi?newsid1081948350,43663, http://www.desertdispatch.com/

4-14-04 NREL Contract

A signing ceremony was held at the National Renewable Energy Laboratory on April 13 marking continued management and operation of the lab for DOE by Midwest Research Institute, with Battelle Memorial Institute as part of the management team. Story at: http://releases.usnewswire.com/GetRelease.asp?id=148-04132004

4-13-04 PV Catapult Agenda

The agenda for a meeting on 23 April 2004 in Munich can be found at: http://www.pvcatapult.org/. Topics include solar grade silicon, thin films, cell technologies, feed-in tariffs, results of SWOT analyses, etc. A PV Catapult Seminar in Athens 7-8 May 2004 will cover opportunities, perspectives, potentials, and hurdles in the enlarged EU market, and other topics.

4-13-04 Universal Communication Systems Inc. Share Purchase

Universal Communication Systems Inc. announced that they have executed a share purchase agreement to acquire 51% of GiraSolar PV of Amsterdam, Holland, that includes part ownership of Stroomwerk Energy BV and Solar Service Buro BV. Story at:

http://biz.yahoo.com/bw/040413/135156 1.html

Universal Communication Systems: http://www.ucsy.com/

Stroomwerk: http://www.stroomwerk.nl/

4-13-04 California, Solar Installation for Aerospace Manufacturer

Paul Akian has installed more than 40,000 square feet of solar panels on the roof of his air-filter manufacturing plant in Valencia, generating more than half of his company's peak usage. The system is the largest ever installed by California Green Designs. Story through Solarbuzz at: http://www.solarbuzz.com/index.asp

http://www.dailynews.com/Stories/0,1413,200%7E20949%7E2077923,00.html

4-13-04 Renewable Energy Certificates

The Defense Energy Support Center has a Solicitation titled "Renewable Energy Certificates-NV, MN, MI, DC" at: http://www.desc.dla.mil/DCM/DCMSolic.asp?SolicID=698
Highlighted through the Green Power Network:
http://www.eere.energy.gov/greenpower/home.shtml

4-13-04 California, Frito Lay PV Systems

Solar Integrated Technologies has authorization to proceed with installation of 3 100-kW PV integrated roof systems for Frito Lay. With completion, Frito Lay will have 500 kW of SIT PV systems in service. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR356.htm Solar Integrated Technologies: http://www.solarintegrated.com/

4-13-04 U.S., Energy Tax Bill (Platts Inside Energy - subscription)

Platts Inside Energy (subscription) reports that Senate Democrats and Republicans have agreed on how they will complete debate on a corporate tax bill that includes a \$14-billion package of energy tax incentives.

4-12-04 Germany, 10 MW Plans

PowerLight and K & S Consulting plan installations equal to 10 MW in Bavaria, Germany. Story at Photon International: http://www.photon-magazine.com/news/news 2004-04%20eu%20sn%20Solarpark%20Neumarkt.htm

4-12-04 Nevada, Renewable Energy Rules

Renewable energy rules that establish incentives for a solar energy demonstration program have been adopted by the Nevada Public Utilities Commission. Starting in July, participants can get \$5 per Watt of capacity generated by solar energy systems, up to a total of 500 kW. Story through Solarbuzz at: http://www.krnv.com/Global/story.asp?S=1774455&nav=8faOMBFH

4-12-04 ECD Plans

Energy Conversion Devices hopes that increased PV sales through its subsidiary United Solar Ovonic LLC can help the renewable energy company out of negative margins. Story at Photon International: http://www.photon-magazine.com/news/news 2004-04%20am%20sn%20ECD%20Quarter%20Results.htm

4-12-04 Spain's Feed-in Tariff

A new law includes a guaranteed payment of 39.6 eruo cents (49.5 cents) per kWh for systems up to 100 kW for 25 years, with payment on 80% of rated power output beyond that. Story at Photon International: http://www.photon-magazine.com/news/news 2004-04%20eu%20sn%20Spain%20royal%20decree.htm

4-12-04 More on the Multi-gap Solar Cell

Additional coverage of a new material concept for solar cells, a single semiconductor with multiple band gaps, can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6482

4-12-04 Green Energy in the West

The Operational Rules Committee of the Western Renewable Energy Generation Information System released draft interim operating rules for a system to track and verify renewable energy generation in the West. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6485

Western Governor's Association: http://www.westgov.org/wieb/wregis/documents.htm

4-12-04 North American Energy Summit this Week

Coverage of the North American Energy Summit can be found at:

http://www.azcentral.com/news/articles/0411westenergy11.html

http://www.westgov.org/wga/initiatives/energy/summit/

http://news.yahoo.com/news?tmpl=story&u=/ap/20040412/ap on bi ge/farm scene 2

4-12-04 SolFest Southwest

SolFest will be held April 17-18, 2004 in Scottsdale, Arizona. For more information see the Web site at: http://solfestsouthwest.org/2004/index.htm

4-12-04 Montana, Solar Electric Demos

Applications are being accepted by the National Center for Appropriate Technology for the 2004 Residential Solar Electric Demonstration Project, the 2004 Fire Station Solar Electric Demonstration Project, and Sun4Communities. Details at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO165.htm

4-12-04 Norddeutsche Affinerie Solar Cell Interest (March 2004)

For a press release on this company's interest in solar cells (noted by Photon International), see the press release (English, Public Relations, press release 3-3-04) at:

http://www.business.com/bdcframe.asp?ticker=G.NAF&src=http%3A//rd.business.com/index.asp%3Fbdcz%3Dcp.l.cc.ml.e%26bdcr%3D0%26bdcu%3Dhttp%253A//www.na-

ag.com/%26bdcs%3D9E8A5441-EEFC-4528-AF2D-2A13C09C509E%26bdcf%3D4ee82281-ba94-11d4-90ff-

00805fa7885a%26bdcp%3D%26partner%3Dbdc%26title%3DNORDDEUTSCHE%2520AFFINE RIE%2520AG&back=http%3A//www.business.com/directory/industrial_goods_and_services/mate_rials/metals/copper_and_copper_loys/norddeutsche_affinerie_ag/profile/&path=/directory/industrial_goods_and_services/materials/metals/copper_and_copper_alloys

4-12-04 U.S., Top Ten Utility Green Pricing Programs

The top ten utility green pricing programs are described on the Green Power Network site at: http://www.eere.energy.gov/greenpower/topten.shtml

4-9-04 Universal Communication Systems, Inc. Chinese Venture

Universal Communication Systems, Inc., announced that the company has signed an agreement with their Chinese joint venture partners to start a program of "PV Solarization" with 2 test cases - PetroChina Gas Stations in China. Story at: http://biz.yahoo.com/prnews/040408/flth011_1.html Universal Communication Systems: http://www.ucsy.com/

4-9-04 Interstate Renewable Energy Council Newsletter

See the latest newsletter from IREC for updates on a range of topics from PV projects in Oregon to million solar roofs, as well as links to updated information on state incentives for renewable energy (DSIRE), events, and fact sheets. Website: http://irecusa.org/

Newsletter: http://www.irecusa.org/commout/enewsletter.html

4-9-04 Pennsylvania Energy Development Authority

Governor Edward Rendell signed an executive order to revitalize the Pennsylvania Energy Development Authority to provide financing for a wide range of energy research, development and demonstration projects that will promote and utilize indigenous energy resources in Pennsylvania. Story at: http://biz.yahoo.com/prnews/040408/phth044 1.html

4-9-04 More on Solar Electrolyzer for Hydrogen

Hydrogenics announced that the National Research Council Canada will take delivery of a HyLYZER electrolyzer which will use solar power to make pure hydrogen from water. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6464

4-9-04 MIT Study of Solar Impacts on Emissions

Researchers at MIT's Laboratory for Energy and the Environment's Analysis Group for Regional Electricity Alternatives looked at how emissions reductions from PV systems vary across the 48 states. Press at: http://www.ascribe.org/cgi-bin/spew4th.pl?ascribeid=20040408.084616&time=10

4-9-04 U.S. Energy Bill Tax Package

The combined corporate tax / energy tax bill will probably come up for more cloture votes when the Senate returns from recess on April 20. According to Environment and Energy Daily (subscription), Senate leaders have come to agreement on a finite list of amendments to the bill, which clears the way for a vote.

4-9-04 Wine and Solar Panels

Researchers have found that solar panels manufactured with red wine produce up to 12% more electricity than solar panels without it. Story at: http://www.winespectator.com/Wine/Daily/News/0,1145,2403,00.html

4-9-04 WorldWater Corp Press

A correction to the press release on WorldWater Corp.'s \$3.64 M financing agreement can be found at: http://biz.yahoo.com/bw/040408/85542 1.html

4-7/8-04 California, Riverside PV Installation

A \$211,500 award from The Gas Company to the Riverside Housing Development Corporation helped to offset costs for the City of Riverside Public Utilities to install 47 kW of PV on low-income apartments. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR354.htm

4-7/8-04 Sustainable Energy Coalition on Renewable Energy Funding (Ken Bossong)

The Coalition delivered a letter to congressional appropriators on April 6 calling for substantially increasing federal support for renewable energy technologies. The letter calls for a PV budget of \$100 million. News release, Sustainable Energy Coalition, 4-6-04.

4-7/8-04 More on Kyocera's Solar Electric Facility

More on Kyocera's plans to install a major solar electric generating facility at its North American headquarters can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6459

Kyocera Solar: http://www.solaraccess.com/marketplace/compdetail?compid=964

4-7/8-04 Aquentium Subsidiary Charis Energy Development's Purchase Orders

Aquentium, Inc. announced that its subsidiary, Charis Energy Development, Inc., has received purchase orders exceeding \$10 million for their "newly invented non silicone, flexible, light weight solar panel." Charis Energy Development's initial marketing plan was to focus on international

sales; however, they will expand the focus to cover schools and universities in the U.S. Said Aquentium President Mark Taggatz, "We are selling our panels at a very affordable price of \$2.50 per watt." Story at: http://biz.yahoo.com/prnews/040407/law050 1.html

4-7/8-04 Sunways AG

Information on Sunways revenues can be found at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUCO120.htm. In 2003, Sunways expanded its production capacity to 12 MW and launched new products. The product portfolio was complemented by monocrystalline solar cells in November 2003.

Sunways AG: http://www.sunways.de/en/index.php

4-7/8-04 Spire Solar Appointment

Spire Corporation announced the Spire Solar has appointed David Wissoker as Sales and Marketing Manager of Solar Equipment. Information at:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=2004_0407005781&newsLang=en

4-7/8-04 ICP Solar Technologies Appointment

ICP Solar Technologies announced the appointment of Andrew Morris as Managing Director of ICP Solar Technologies (UK) Ltd., its European division. Morris will be responsible for management of commercial and financial operations at ICP Solar Technologies, which is instrumental in ICP's strategic entry into the large-scale power and solar rooftop markets. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6472

ICP Solar: http://www.icpsolar.com/

4-7/8-04 ExxonMobile Report

ExxonMobil's study on Energy Trends, Greenhouse Gas Emissions and Alternative Energy, February 2004, can be found at:

http://www.exxonmobil.com/Corporate/Newsroom/Newsreleases/xom_nr_040204.asp

4-7/8-04 Inverters UL Approval

PV Powered announced it received Underwriters Laboratories 1741 Listing for the StarInverter PVP1800 and PVP2800, 1800-W and 2800-W utility interactive inverters. More information at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT72.htm

PV Powered: http://www.pvpowered.com/

4-7/8-04 More Coverage of GE Acquisition of AstroPower

Additional coverage of GE's acquisition of AstroPower can be found at: http://www.csrwire.com/sfarticle.cgi?id=1387

4-7/8-04 U.S. Energy Bill Tax Package

The Senate attached a \$13 billion energy tax package to other proposed legislation, but fell short of votes that would have allowed final debate and passage.

4-6-04 WorldWater Corp. Financing Agreement

WorldWater Corp. announced it has received a \$3.64 million common stock purchase commitment, with a call on an additional \$3.64 million at WorldWater's option, for a total of \$7.28 million. Story at:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=2004_0406005145&newsLang=en_WorldWater: http://www.worldwater.com/

4-6-04 WorldWater in Iraq

Chairman and CEO Quentin T. Kelly was interviewed on NPR's Marketplace about the risks and potential rewards of pursuing contracts in Iraq. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6450

4-6-04 Spectrolab in Space Technology Hall of Fame (Mike Kalachian)

Spectrolab's multi-junction solar cells were inducted into the Space Technology Hall of Fame last week, and four Spectrolab associates were honored - Bruce T. Cavicchi, James Ermer, Dr. Nasser H. Karam, and Dr. Richard R. King. To date, Spectrolab has delivered more than 1.4 million multi-junction space solar cells to leading domestic and international satellite manufacturers. Spectrolab solar cells and panels have powered more than 500 satellites and interplanetary missions during the past 40 years. Spectrolab press release: http://www.spectrolab.com/com/news/news-detail.asp?id=155

4-6-04 Coverage of David Garman's Appointment

Additional coverage of David Garman's dual appointments can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6455

4-6-04 More on GE's Acquisition of AstroPower

Additional coverage of GE's acquisition of AstroPower can be found at: http://atlanta.bizjournals.com/atlanta/stories/2004/04/05/story2.html "We're in it to be successful," said GE Energy CEO John Rice.

4-6-04 Black & Veatch Study

Black & Veatch has completed an economic impact study of renewable energy in Pennsylvania to determine potential benefits of investments. More at:

http://ua.pennwellnet.com/articles/article_display.cfm?Section=ONART&Category=INDUS&PUBLICATION_ID=22&ARTICLE_ID=202074

Coverage at SolarAccess: http://www.solaraccess.com/news/story?storyid=6441

4-6-04 Security PV Market

An article on security PV (SPV) markets can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6437

4-6-04 U.S., Congressional Energy Hearings

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

4-6-04 U.S. Energy Bill

The Senate attached an energy tax package to corporate tax legislation. For information on the solar provisions, see SolarAccess: http://www.solaraccess.com/news/story?storyid=6452 Senate Press: http://energy.senate.gov/news/rep_release.cfm?id=220102

4-5-04 David Garman Appointment

U.S. Secretary of Energy Spencer Abraham issued a statement upon the announcement by the White House of their appointment of David Garman, currently DOE's Assistant Secretary of Energy Efficiency and Renewable Energy, to serve as the acting Under Secretary of Energy. Garman will continue his duties as Assistant Secretary of EERE while serving as the acting Under Secretary. Story at: http://releases.usnewswire.com/GetRelease.asp?id=147-04022004 More at:

http://www.nytimes.com/2004/04/04/politics/04ENER.html?ex=1082089225&ei=1&en=0d9c7919df9e084b

4-5-04 San Diego, California, Kyocera Plans to Build Solar Electric Generating System

Kyocera announced plans to install a 251-kW solar electric generating facility at its North American headquarters and Kearny Mesa plant using 1,680 Kyocera KC-167G PV modules and 210 custom-manufactured light-filtering PV modules forming a carport. Story at: http://biz.yahoo.com/bw/040405/55394 1.html

4-5-04 Germany, More on Phonix SonnenStrom Plant

Phonix SonnenStrom AG inaugurated the largest installation in the world employing Mitsubishi Heavy Industries' MA 100 amorphous silicon PV modules. The 400-kW installation, located near Munich, uses 3,980 modules. Story and photos at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPR149.htm

Phonix SonnenStrom AG: http://www.SonnenStromAG.de/

4-5-04 Germany, Solar Electric Plant at CREATON AG

A 583-kW installation financed by private investors through a solar fund was inaugurated at CREATON AG in Ichenhausen-Autenried in Germany, representing one of the largest solar plants installed on a roof in western Bavaria. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR150.htm

4-5-04 Germany, SolarWorld AG Sales

SolarWorld AG grew Group sales in FY 2002 by 32.6% over the prior year. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUCO119.htm SolarWorld: http://www.solarworld.de/englisch/engl_frame.htm

4-5-04 Kirbati, Solar Electric Systems

The European Union is funding a rural electrification program comprising 1700 solar home systems on the outer islands of the Pacific island state of Kirbati. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPR112.htm

4-5-04 Renewable Energy in India

Britain's Renewable Energy and Energy Efficiency Partnership agreed to help India in its efforts to add 10% of the 100,000-MW generation capacity being created by 2012 through renewable energy. Story at: http://in.news.yahoo.com/040402/43/2ccvl.html

4-5-04 India, Solar Panels from Bharat Heavy Electricals Ltd.

The Bank of India is negotiating with Bharat Heavy Electricals Ltd. for the supply of solar panels. BHEL has developed three prototypes for Bank of India and the bank will choose one of them and negotiate the price. Story through Solarbuzz at: http://sify.com/finance/equity/fullstory.php?id=13445107

4-5-04 SolarSmart in Ireland

SolarSmart is a new project launched as part of SMART, Northern Ireland's Electricity's new program to support sustainable energy alternatives. Story at: http://www.nie.co.uk/media/newsstory.asp?idcode=656

4-5-04 Field Testing of Inverter

Inverters Unlimited, Inc. will commercialize a new electric power inverter aimed at the solar energy market under a \$200K contract with the New York State Energy Research & Development

Authority. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT70.htm Inverters Unlimited: http://www.invertersunlimited.com/

4-5-04 Xantrex Multi-Year Commitment

Xantrex Technology Inc., has received a CDN\$7.2M multi-year commitment from Industry Canada's Technology Partnerships Canada (TPC) program for part of the cost of development of advanced power electronics technology for sustainable energy systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO202.htm

Xantrex: http://www.xantrex.com/

4-5-04 Green Power in Rhode Island

Rhode Island Governor Carcieri announced the state will make a purchase of renewable power for the State House in the form of renewable energy certificates to generate 100% of the electricity used at the State House for 5 years. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6429

4-5-04 Idaho Renewables

Governor Dirk Kempthorne vetoed 6 bills last week, including proposals for tax breaks for renewable energy. Kempthorne said the \$6 million price tag is too much for a state still recovering from the recession of 2001. Story at: http://www.idahostatesman.com/news/story.asp?ID=64600

4-5-04 U.S., Congressional Energy Hearings

House Energy & Commerce, FY 2005 Budget Priorities for DOE, held April 1, 2004. Download prepared testimony of Spencer Abraham at:

http://energycommerce.house.gov/108/Hearings/04012004hearing1231/Abraham1921.htm or http://www.energy.gov/engine/content.do?PUBLIC_ID=15381&BT_CODE=PR_CONGRESSTES_T&TT_CODE=PRESSSPEECH

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

4-5-04 U.S. Energy Bill

Environment & Energy Daily (subscription) reports that the Senate will attempt to attach a \$15 billion energy tax package to corporate tax legislation.

4-5-04 More on Solargenix in Chicago

Solargenix Energy has secured a contract for a high-capacity manufacturing facility for their solar thermal collectors. The company reached an agreement to complete a multi-million dollar procurement contract between the City of Chicago and its partners. The agreement provides the initial market for a solar thermal manufacturing facility in the city. More on the agreement and Solargenix developments at SolarAccess: http://www.solaraccess.com/news/story?storyid=6428 Solargenix: http://www.solaraccess.com/marketplace/compdetail?compid=1250

4-5-04 Solar Thermal Systems

James & James Ltd has published "Solar Thermal Systems", by Dr. Felix A. Peuser, Karl-Heinz Remmers, and Martin Schnauss, which summarizes the theoretical and practical knowledge gained from over 20 years of research, implementation and operation of solar thermal installations. Information at SolarAccess:

http://www.solaraccess.com/marketplace/catalog/showitem.jsp?itemid=51

4-2-04 Universal Communication Systems, Inc. Chinese Agreement

Universal Communication Systems, Inc. announced that the company has signed a major joint venture agreement with the General Manager of JiangSu Yangtze Petrochemical Co. Limited of Shanghai, China. A new Chinese corporation named Shanghai Gaochen Energy Technology and Development Company Limited has been formed, and will initially market a range of AirWater machines and systems to the Chinese government and commercial markets. Also, for Universal's subsidiary Millennium Electric T.O.U. Limited's PV Solar Energy Panels and Systems, the companies will jointly develop the local market for Photo Voltaic Solar Panels and Systems, and the group anticipates eventually contracting to manufacture a range of Millennium's PV panels in China. Story at: http://biz.yahoo.com/prnews/040401/fith009_1.html

Universal Communication Systems: http://www.ucsy.com/

AirWater: http://www.airwatercorp.com/

Millennium: http://www.millennium-electric-inc.com/

4-2-04 Fronius in the U.S.

Fronius USA will organize its distribution network via sales partners, and 4 major PV distributors have become Fronius sales partners so far. More at:

http://www.fronius.com/news/view article.php?id=61&templet=3&Ing=e

4-2-04 ARISE-Dankoff Termination of Agreement

ARISE Technologies Corporation is announcing that the agreement to purchase all of the outstanding shares of Dankoff Solar Products, Inc. has been mutually terminated. Story at: http://www2.ccnmatthews.com/scripts/ccn-release.pl?/current/0401057n.html

4-2-04 Oregon Solar

Grant activities of the Energy Trust of Oregon can be found in the story at: http://cnniw.yellowbrix.com/pages/cnniw/Story.nsp?story_id=49302458&ID=cnniw&scategory=Energy%3AAlternative&. More than 100 new solar energy systems have been installed in homes and businesses in the state in the past year.

4-2-04 Support for Renewable Energy (Platts Inside Energy, subscription)

Senators Larry Craig and Mike Crapo of Idaho released a letter to Senate appropriators asking them to ensure the Renewable Energy Systems and Energy Efficiency Program - which awards grants to farmers, ranchers and rural businesses for renewable energy projects - is fully funded at \$23 million in FY-05. See press release at: http://crapo.senate.gov/. Crapo, Craig and fourteen other Senators wrote, "This is an important initiative. It is the very first agricultural program to promote broad renewable energy and energy efficiency measures for the farm and rural business sectors. Clean energy development has become an alternate source of revenue for the farm sector and addresses many of our nation's current challenges, including job creation, economic development, ensuring a sustainable energy supply, and environmental quality improvements."

4-2-04 U.K. Renewables

For a copy of "Renewable Supply Chain Gap Analysis, and other U.K. renewables publications, see: http://www.dti.gov.uk/energy/renewables/

4-2-04 U.S., Congressional Energy Hearings

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

4-2-04 Solar Tower Overview

US Solar Tower developer Solar Mission Technologies, Inc., and Australian Solar Tower

developer EnviroMission Limited had accepted an invitation from Stanford University's Graduate School of Business, Energy Club, to present an overview of the technology on 1 April 2004 in Palo Alto. Story at: http://biz.yahoo.com/prnews/040401/Inth006 1.html

4-1-04 GE Energy Acquisition of AstroPower

GE Energy announced it has completed its acquisition of substantially all of the U.S. business assets of AstroPower, Inc. Said John Rice, president and CEO of GE Energy, "Solar power has great potential, since solar cells can be utilized almost anywhere. It already is a cost-effective source of power in many remote, off-grid locations, and as system costs come down (over the next few years), we expect demand will increase for on-grid residential and commercial applications." More on the transition: http://biz.yahoo.com/bw/040331/315947 1.html
Solarbuzz: http://www.solarbuzz.com/News/NewsNACO200.htm GE press and AstroPower fact sheet: http://www.gepower.com/prod_serv/products/solar/en/index.htm

4-1-04 Hydrogen Generator

Hydrogenics Corporation announced that the National Research Council Canada would take delivery of a HyLYZER(TM) (HyLYZERTM is a trademark of the Hydrogenics Corporation) electrolyzer, which will use solar power to make hydrogen from water. Said Pierre Rivard, President and CEO of Hydrogenics, "This installation at NRC demonstrates perhaps the most important benefit of using hydrogen as an energy carrier. When we use a resource such as solar power to generate hydrogen as a fuel for fuel cell appliances and vehicles, we have a truly renewable, non-polluting energy system." Story at:

http://www.newswire.ca/en/releases/archive/March2004/23/c3202.html

Hydrogenics: http://www.hydrogenics.com/

Highlighted by ReFocus News-in-Brief: http://www.re-focus.net/

4-1-04 Cypress Semiconductor Manufacturing / SunPower (Harin Ullal)

Cypress Semiconductor is looking at India for setting up a manufacturing facility for its SunPower business. If a facility is set up in India, it would be the company's second unit in Asia. Story at: http://www.siliconindia.com/shownewsdata.asp?newsno=23617&newscat=Technology

4-1-04 Photovoltaic Venetian Blind

A Spanish university has developed the "Photovoltaic Venetian Blind" comprising several PV modules arranged to control sunlight entering the room, and producing electric power. Information at: http://www.irc-ire.lu/matching/completerec.cfm?BBS_ID=10343&COMPANY=21240 Highlighted at ReFocus News-in-Brief: http://www.re-focus.net/

4-1-04 U.K., Azure Solar with Nemex

Azure Solar has chosen Nemex to launch their UK business. Said Susie Roddick, Azure's marketing director, "The UK market is in very early stages but looks like it will be growing quite fast." Story at:

http://www.edie.net/gf.cfm?L=left_frame.html&R=http://www.edie.net/news/Archive/8236.cfm

4-1-04 Renewable Energy Handbook

The World Energy Council has published a new Handbook on Renewable Energy Projects that provides an overview of leading renewable energy resources, descriptions of different categories of renewable energy projects, and existing policies and drivers. Information at: http://pei.pennwellnet.com/articles/article_display.cfm?Section=ONART&Category=INDUS&PUBLICATION_ID=6&ARTICLE_ID=201831

4-1-04 Power-Spar Solar Concentrator

Menova Engineering's Power-Spar(R) (Power-Spar® is a registered trademark of the Menova Engineering Inc.) is a high-efficiency solar concentrator that uses a patented system to focus the sun's energy creating heat, hot water, and electrical power. Story at: http://www.newswire.ca/en/releases/archive/March2004/23/c3150.html Highlighted at ReFocus News-in-Brief: http://www.re-focus.net/

4-1-04 U.S., Congressional Energy Hearings

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

MARCH

3-31-04 Japan, Loan Rates for Solar Homes

Sumitomo Trust & Banking Co. will offer lower housing loan rates for buyers of houses from Sekisui Chemical Co. that have a solar energy generation system. Story through Solarbuzz at: http://www.solarbuzz.com/News/Newspage.asp http://home.kyodo.co.ip/all/display.isp?an=20040330267

3-31-04 India, Solar Water Pumping

Bharat Heavy Electricals has a contract for supply of 700 sets of solar-powered water pumping systems for the Punjab Energy Development Agency. Story at: http://www.business-standard.com/updates/news.asp?story=8559

3-31-04 Uganda, Solar Power for All by 2010

The government is linking up with finance institutions around the country to implement plans to spread solar power to Uganda's 230 counties by 2010. Story through Solarbuzz at: http://allafrica.com/stories/200403300354.html

3-31-04 Solar-powered Global Flight

ESA's Technology Transfer Programme will supply state-of-the-art technologies to assist Bertrand Piccard's flight around the world in a single-pilot solar-powered aircraft. Story and photos at ESA News: http://www.esa.int/export/esaCP/SEMJ90FCASD_index_0.html

3-31-04 U.S., Congressional Energy Hearings

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

3-31-04 Solargenix in Chicago

Solargenix Energy has opened a new manufacturing facility in Chicago. The city agreed to purchase \$5M worth of solar energy systems from Solargenix in the next 3 years to bring the company and jobs to Chicago. The new Solargenix operation has already begun manufacturing compound parabolic concentrators. Story at: http://www.ascribe.org/cgi-bin/spew4th.pl?ascribeid=20040330.101934&time=10

3-31-04 APS Solar Trough Plant (Kevin Eber)

For more on the APS solar trough power plant, see EERE Network News March 31, and the APS press release March 24 at:

http://www.eere.energy.gov/news/archive.cfm/pubDate=%7Bd%20%272004%2D03%2D31%27%7D#6774

http://www.aps.com/general_info/newsrelease/default.html?year=2004

3-30-04 Kyocera's New Domestic Power Generation Systems

Kyocera announced the release, in April 2004, of the newly developed residential solar power generation systems for 2004. More on Kyocera developments at:

http://www.japancorp.net/Article.Asp?Art ID=6968

Kyocera: http://global.kyocera.com/

3-30-04 Germany, 1.4 MW Solar Project

A 9,000-module, 1.4-MW solar power plant has been connected to the grid in the Saarland region

of Germany. Story at photo at SolarAccess:

http://www.solaraccess.com/news/story?storvid=6398

3-30-04 Glenn Hamer's Testimony (Colin Murchie)

The written testimony of Glenn Hamer, Executive Director of the U.S. Solar Energy Industries Association, before the House and Senate Energy & Water Appropriations subcommittees requesting research funding of \$100 million for PV (along with other requests) can be found at: http://www.seia.org/news/releases/release042604appropstestimony.asp

Coverage at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO164.htm

3-30-04 Arizona, Solar Tax Incentives

Arizona officials said the state must protect its position as an innovator in solar energy. Said Rep. Ken Clark, "We're in a race with other states at this point, which you haven't seen in the past." For coverage of recent activities, see News at the East Valley Tribune: http://www.aztrib.com/index.php?sty=19328

3-30-04 U.S., Congressional Energy Hearings

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

3-29-04 Germany, S.A.G. Solarstrom Solar Park

S.A.G. Solarstrom AG is planning to install 5 solar-power stations totaling 276 kW around Lauda Koenigshofen starting mid-2004. Prospective investors can take part with a minimum contribution of 2,000 euro. The project offers a net yield of 6.3% to investors. Information at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR148.htm

S.A.G. Solarstrom: http://www.solarstromag.net/

3-29-04 Florida, JEA Renewables

To reach its goal of 7.5% of electricity generated from renewable resources by 2015, JEA is accepting bids from companies that specialize in providing renewable energy. More than 100 companies have requested the RFP so far. Story at: http://www.jaxdailyrecord.com/showstory.php?Story_id=40572

3-29-04 Oregon, Solar PV Projects

Seven projects have been selected as recipients of Energy Trust of Oregon funding. For more on each of these projects, see Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR351.htm
Energy Trust of Oregon: http://www.energytrust.org/

3-29-04 Texas, Solar Incentives

Janet's Solar Electric announced that in April 2004, Austin homes and businesses will have the opportunity to obtain rebates of up to \$5/Watt by installing solar energy systems. Austin Energy has committed to paying 80% of the total solar system, up to \$15K for residential customers, and \$100K for commercial customers. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6386

Janet's Solar Electric: http://www.janetssolarelectric.com/

3-29-04 California, RWE SCHOTT Solar in San Diego County (Bill Jeppesen)

RWE SCHOTT Solar Inc. announced that 4 County of San Diego facilities are now powered

partly by the sun. Combined, the recently installed PV systems are expected to produce nearly 500,000 kWh per year. RSS installed 2 45-kW free-standing SunRoof(TM) (SunRoof^{TM)}is a trademark of RWE SCHOTT Solar, Inc.) FS PV systems at an operations center and a library. Also, a 100-kW system was installed at a county regional center in Chula Vista with another 100-kW system going in at the regional center in Vista. Press release. Also coverage and photos at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR352.htm

RWE SCHOTT Solar: http://www.rweschottsolar.com/

3-29-04 California, Emerging Renewables Rebate Program

See the notice regarding eligibility to participate in the Emerging Renewables Rebate Program as an equipment seller. http://www.energy.ca.gov/renewables/notices/2004-03-26 erp notice.html

3-29-04 Ohio, Airship Facility

Akron's Airdock may be converted to an airship producing facility with a new owner. City, county, and state officials will have an incentive package ready to help refurbish the Airdock if Lockheed Martin gets the go-ahead for the production of a prototype airship under a potential \$50-million contract from the Missile Defense Agency. The unpiloted airship wouldn't carry fuel, but would generate power using a PV covering. It would be controlled from the ground and would be capable of staying on station for at least 30 days. Story at: http://www.ohio.com/mld/ohio/business/8281647.htm

3-29-04 Scotland, Green Power Incentives

Green electricity projects will receive cash incentives for connecting renewables to the network. The program will help the government and the Scottish Executive in reaching their targets to increase renewable electricity generation by 2010 to 10 and 20 % of the total production, respectively. Story at: http://business.scotsman.com/utilities.cfm?id=359202004

3-29-04 Turkey, World Bank Renewable Energy Loan

The World Bank has approved a \$202.03 million Renewable Energy Loan for Turkey, the main objective being to increase privately owned and operated power generation from renewable sources. Story at:

http://www.menareport.com/story/TheNews.php3?sid=273611&lang=e&dir=mena

3-29-04 U.S., Congressional Energy Hearings

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

Senate Energy & Natural Resources, oversight hearing to examine sustainable, low-emission, electricity generation, April 27, 2004.

3-29-04 More on APS/Solar Trough

Additional coverage of the plans for the APS solar trough installation can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6380 Info on Europe's solar thermal directions can be found at: http://www.solaraccess.com/news/story?storyid=6383

3-26-04 Review of Alliance's Shell Solar/ASiMI Projects (Tina Nickerson)

With help from the Northwest Energy Efficiency Alliance, Shell Solar has leveraged discoveries made at their Vancouver, Washington plant to effect market transformation within PV and semiconductor manufacturing industries. Story at Alliance News: http://www.nwalliance.org/newsletter/NL V8 I1 f2 sharing.htm

3-26-04 Hungary, Solar Panel Manufacturing

SOL@MIO Kft will invest Ft46.3 billion (\$225 million) to set up a solar panel manufacturing facility and R&D center, with plans to manufacture at least 20 MW of solar panels by the end of the year. Story through Solarbuzz at:

http://www.budapestsun.com/full_story.asp?ArticleId=%7B7560EAF6481B40BAB824210086130 AFF%7D&From=Business

3-26-04 Solar Cities (IREC)

A new report on "Solar Cities" gives information on a dozen Solar City initiatives in which local governments have made significant commitments to deploy solar energy systems on public facilities or in the community, and where municipal utilities add PV to their generation capacity and/or support projects in the community. Information at:

http://irecusa.org/articles/static/1/1080056751 1018302029.html

This and much more news at the Interstate Renewable Energy Council site at: http://irecusa.org/

3-26-04 U.S., Congressional Budget Resolutions and Hearings (Energy)

The House passed its \$820 billion FY 05 budget resolution, H.Con.Res. 393, and now will conference with the Senate, which passed its budget resolution earlier (S.Con.Res. 95) with \$824 billion in discretionary spending. The House budget resolution includes \$3.52 billion (down from FY 04 of \$3.59 billion), and the Senate's has \$3.71 billion, in the energy function. [Energy & Environment Daily, subscription].

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

3-25-04 Multi-gap Solar Cell

Kin Man Yu and Wladek Walukiewicz of the Materials Sciences Division, working with colleagues from Berkeley Labs and others, are investigating a multi-gap material - a single semiconductor with multiple band gaps. Story at: http://www.lbl.gov/Science-Articles/Archive/sb-MSD-multibandsolar-panels.html

3-25-04 IXYS Solar Cell Arrays and Cards

IXYS Corporation announced the release of a new range of Solar Cell PV-Arrays ("Solar Arrays") and PV-Cards(TM) (PV-CardsTM is a trademark of IXYS Corporation) for charging various battery powered and handheld products such as mobile phones. According to the article, "With an efficiency of over 17%, these Solar PV arrays enable the ability to extend run time even in 'low light' conditions and increase battery run time and life in a small footprint...". Story at: http://biz.yahoo.com/bw/040324/245701 1.html IXYS:

3-25-04 New Grinding Machine for Silicon Wafers

A new grinding machine developed in Germany by the Fraunhofer-Institut fur Produktionstechnologie in cooperation with the University of Konstanz endows the surfaces of silicon wafers with V-shaped grooves that enlarge the active surface of the cells, and allow less sunlight to be reflected. More at: http://www.engineering-

<u>uk.co.uk/eng_news.taf?_function=detail&_record=188026&_UserReference=3C2EAB015090542</u> AC40C7FFA&_start=1

3-25-04 PV Activities In Japan (Osamu Ikki)

Sanyo Electric will increase its annual production capacity of PV cells/modules to 133 MW from

63 MW. A new HIT PV cell/module production line will be completed in January 2005. Also, Sanyo plans to reinforce its overseas sales of PV modules, expanding annual sales to 40 MW in 2005 from 3-5 MW. This and much more news by subscription from Resources Total System Co., Ltd, Tokyo, email ikki@rts-pv.com, fax +81-3-3553-8954.

3-25-04 Universal Communication Systems in Israel

Universal Communication Systems Inc. subsidiary Millennium Electric TOU Limited reported that in a field test conducted by Derech Eretz Corporation, the Construction Joint Venture partner of the Government of Israel, Africa Israel Corporation, Canadian Joint Venture Corporation, and Dor Alon Energy Corp. for 1 November through 10 December 2003 and issued 22 February 2004, the company has received better than expected recommendations on their PV Solar Panels. The report concluded, "Solar Power Systems (Millennium's) for the TPR's substantially exceeds design specifications and continue to demonstrate excellent reliability for the past two years."

Story at: http://biz.yahoo.com/bw/040324/245557 1.html

UCSY: http://www.ucsy.com/

Millennium Electric: http://www.millennium-electric.com/

3-25-04 California, Chula Vista Solar Electric System

A 38.6-kW solar electric system has been installed on the roof of the Police Department headquarters, using 244 Kyocera KC158G PV modules. The system was designed and installed by Independent Energy Solutions. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR349.htm

Kyocera: http://www.kyocerasolar.com/news/news detail.cfm?key=82

3-25-04 U.S. FY 2005 Energy Budget Hearings (subject to change)

House Science, Energy, FY 2005 DOE budget request for EE, Science, and others, March 24, 2004. Witnesses included David Garman, DOE Assistant Secretary for Energy Efficiency and Renewable Energy and James Glotfelty, Director, DOE Office of Electricity Transmission and Distribution.

Prepared Testimony, including David Garman's, can be found at: http://www.house.gov/science/hearings/energy04/index.htm

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

3-25-04 Arizona, APS Solar Trough Power Plant

APS broke ground on Arizona's first commercial solar trough power plant, and the first such facility constructed in the U.S. since 1988. The APS Saguaro Solar Trough Generating Station will have a 1-MW generating capacity, and is expected to be online in April 2005. Said Peter Johnston, APS manager of Technology Development, "This project presents a unique opportunity to further expand our renewable energy portfolio. We are committed to developing clean renewable energy sources today that will fuel tomorrow's economy." Story at:

http://biz.yahoo.com/bw/040324/245347 1.html

Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR350.htm

APS: http://www.aps.com/home

Press-Arizona-solar: http://www.azcentral.com/arizonarepublic/business/articles/0325solar25.html

3-24-04 Hitachi's Large Panel of Dye Sensitizing Solar Cells

Hitachi has developed a prototype of a large panel of dye sensitizing solar cells, exhibiting them at "Nano Tech 2004" in mid-March. The company exhibited a unit of four panels about 10 cm on

a side connected together, with a photoelectric conversion efficiency of 9.3% in the lab. Story at: http://neasia.nikkeibp.com/wcs/leaf?CID=onair/asabt/news/297549

3-24-04 Konarka Technologies in Solar Energy Consortium (Joe Romano)

Konarka technologies announced that its European subsidiaries, Konarka Austria and Konarka Technologies AG in Switzerland have been selected to participate in a consortium of leading European PV research agencies in which Konarka will provide a key role in testing, evaluation, and manufacturing of a new breed of low-cost PV cells. The consortium of 13 technology, academic and manufacturing partners from across Europe will collaborate on a 30-month project called Molecular Orientation, Low Band Gap and New Hybrid Device concepts for the Improvement of Flexible Organic Solar Cells (MOLYCELL). Said Daniel Patrick McGahn, executive Vice President and Chief Marketing Officer, Konarka, "The goal of the MOLYCELL project is to overcome crucial obstacles for large-scale production of plastic solar cells." Konarka: http://www.konarka.com/news press eu-collaboration.php

3-24-04 California, Alameda County 1-MW of Solar

The Alameda County Board of Supervisors voted to expand the County's deployment of solar electric power by 1.11 MW. With the addition, Alameda will soon lead the nation's counties in solar use, generating a total of 2.29 MW. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR347.htm

3-24-04 APS Credit Program

The Environmental Portfolio Standard Credit Purchase Program offers customers the opportunity to sell the environmental credits associated with the energy generated by solar systems to APS. The EPS Credit Purchase 2004 fund has reserved \$341,690.84 out of a \$500,000 budget for PV systems less than 5 kW; \$104,565.50 of a \$500,000 budget for commercial PV systems greater than 5 kW; and \$23,800 of \$250,000 for solar water heating. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO162.htm

APS Credit Program: http://www.aps.com/my_community/Solar/eps.html

3-24-04 New Jersey RPS

New Jersey finalized the nation's best renewable energy portfolio standard for solar power, calling for 90 MW of solar by 2008. Said Glenn Hamer, SEIA's Executive Director, "New Jersey is positioning itself to become the clean energy capital of the United States." Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6363

3-24-04 SmartPower Partner with Rhode Island Renewable Fund

SmartPower announced a new partnership with the Rhode Island Renewable Energy Fund to promote clean energy. The Rhode Island Renewable Energy Fund (RIREF) is administered by the Rhode Island State Energy Office. Said Janice McClanaghan, Chief of Energy and Community Services for the Rhode Island State Energy Office, "At the RIREF, part of our mission is to educate customers about clean energy. As such, SmartPower's mission melds perfectly with what we're hoping to accomplish." Story at: http://biz.yahoo.com/bw/040324/245522 1.html Clean Energy States Alliance: http://www.cleanenergystates.org/Funds/fund.php?fund id=17

3-24-04 U.S. FY 2005 Energy Budget Hearings (subject to change)

House Science, Energy, FY 2005 DOE budget request for EE, Science, and others, March 24, 2004. Witnesses include David Garman, DOE Assistant Secretary for Energy Efficiency and Renewable Energy and James Glotfelty, Director, DOE Office of Electricity Transmission and Distribution.

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

3-23-04 Living Organism with Solar PV Chip

Japan's National Institute of Advanced Industrial Science and Technology announced that a joint research group has succeeded in developing the world's first bio photosensor. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6360

3-23-04 XsunX Agreement

XsunX announced it has entered into an agreement with MVSystems, Inc. to produce a working model of its patented glazing process. Per this press, "Completion of this step in the commercialization process will bring the use of the Company's next generation technology closer to use in the mass production of environmentally friendly photovoltaic products in the glass, optical film and building industries." Press at:

http://www.primezone.com/pages/news_releases.mhtml?d=54600

MVSystems: http://www.mvsystems.info/

XsunX: http://www.XsunX.com/

3-23-04 Universal Communication Systems New Orders

Universal Communication Systems, Inc. subsidiary Millennium Electric TOU Limited announced the execution of a new agreement with Maass Regenerative Energien GmbH granting exclusivity for the German market for a range of Millennium Brand PV Solar Panels and related products. The agreement calls for Maass to purchase up to \$15 million in value of PV Solar Energy Panels for the German market in the year 2004. Story at: http://biz.yahoo.com/prnews/040323/fltu005 1.html

3-23-04 Australia, Renewable Energy Center

An award of an AUD\$5.5 million Federal Government grant through the Australian Greenhouse Office will assist in establishing a new renewable energy center in Western Australia. The Research Institute for Sustainable Energy, RISE, will be located at Murdoch University in Perth. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6358

3-23-04 Colorado Renewable Energy Conference

The Colorado Renewable Energy Conference, "Renewable Energy: It Makes Sense" is 25-27 June at the University of Denver. Timothy Wirth, President of the United Nations Foundation and Better World Foundation is the keynote speaker. [CRES Electronic Newsletter]. Information & Registration: http://cres-energy.org/conference/

CRES: http://cres-energy.org/index.html

3-23-04 U.S. FY 2005 Energy Budget Hearings (subject to change)

House Science, Energy, FY 2005 DOE budget request for EE, Science, and others, March 24, 2004. Witnesses include David Garman, DOE Assistant Secretary for Energy Efficiency and Renewable Energy and James Glotfelty, Director, DOE Office of Electricity Transmission and Distribution.

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

3-22-04 "Solar Wall" Integrates PV

A Welsh technology center has integrated the SolarMount(TM) (SolarMount[™] System is a trademark of the UniRac Inc.) System into an 11,000-square-foot "Solar Wall" which generates

85 kW at peak hours from 2,400 Shell Solar CIS thin-film modules. The array curves from the roofline to the ground forming the southern façade of the building. Story and photo at SolarAccess: http://www.solaraccess.com/news/story?storyid=6342

3-22-04 SolFest Southwest

SolFest Southwest takes place 17-18 April 2004 in Scottsdale, Arizona. For activities, speakers, workshops, exhibits, registration and other key information, see:

http://solfestsouthwest.org/2004/index.htm

Regarding Kyocera's sponsorship, see:

http://www.kyocerasolar.com/news/news detail.cfm?key=78

Sponsors: http://solfestsouthwest.org/2004/more info 1.htm#sponsor

3-22-04 North American Energy Summit

See the Web site for information on this Summit, 14-16 April, Albuquerque, New Mexico - agenda, registration, expo, breakout sessions, etc.

http://www.westgov.org/wga/initiatives/energy/summit/index.htm [highlighted in the SEIA Newsletter]

3-22-04 "Turning on Renewable Energy"

The 3rd in a 3-part series of adaptations from Lester R. Brown's book "Plan B: Rescuing a Planet Under Stress and a Civilization in Trouble", with a section on "Solar Energy Rises" [highlighted at SolarAccess http://www.solaraccess.com/news/index.jsp] can be found at: http://www.motherearthnews.com/index.php?page=article&id=2044

3-22-04 Heavy Metals Products Self-Remediate

In a news conference March 25, Solucorp Industries will announce and demonstrate a new environmental technology that can make batteries, fluorescent lights, circuit boards, solar cells, and other metal-containing items self-remediating. 'Integrated Fixation Systems' is designed to provide a system that eliminates contamination from heavy metals once the products are disposed of. Announcement at: http://biz.yahoo.com/bw/040322/225835 1.html

3-22-04 More on the Moscone Center PV Dedication

More on the dedication of the Moscone Center PV system installed by PowerLight Corporation, with photos, can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6345

3-22-04 U.S. FY 2005 Energy Budget Hearings (subject to change)

House Science, Energy, FY 2005 DOE budget request for EE, Science, and others, March 24, 2004. Witnesses include David Garman, DOE Assistant Secretary for Energy Efficiency and Renewable Energy and James Glotfelty, Director, DOE Office of Electricity Transmission and Distribution.

House Energy & Commerce, FY 2005 budget priorities for the Department of Energy, April 1, 2004.

3-19-04 California, More on Moscone Center PV System Dedication

Mayor Gavin Newsom and others dedicated the new 675 kW solar electric system recently completed by PowerLight Corporation at the Moscone Center in San Francisco. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR346.htm

PowerLight Corporation: http://www.powerlight.com/

3-19-04 WolrdWater Corp. Agreement

WorldWater Corp. announced it has signed a Memorandum of Understanding with Counterpart International, an NGO, to collaborate on agricultural irrigation development and water management projects. Story at:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=2004 0319005036&newsLang=en

WorldWater: http://www.worldwater.com/

3-19-04 U.S. Energy Policy and Legislation on Renewables

A panel yesterday discussed renewable energy provisions of the energy bill stalled in Congress, and some experts said the measures should be passed as stand-alone legislation to increase energy security. Story at:

http://framehosting.dowjonesnews.com/sample/samplestory.asp?StoryID=2004031823530004&T ake=1

3-19-04 U.S. FY 2005 Energy Budget Hearings (subject to change)

House Energy & Commerce, FY 2005 Budget Priorities for the Department of Energy, 4-1-04.

3-18-04 IBM's Low-cost Process to Make Semiconductors

A team of researchers at IBM's T.J. Watson Research Center recently developed a simple, low-cost process to make extraordinarily thin films of semiconducting materials that allows electrical charges to move through them about 10 times more easily than reported for other similar approaches. Said David Mitzi, the IBM Research team leader, "These types of easily processed semiconducting films could eventually be used to make circuitry for very-low-cost or flexible displays, high-performance smart cards, sensors and solar cells or for flexible electronics coated onto a wide variety of molded or plastic shapes." Story at: http://biz.yahoo.com/bw/040317/175593 1.html

3-18-04 Universal Communication Systems Inc. Agreement with Australian Group

Universal Communication Systems Inc. entities recently executed an agreement with an Australian industrial group. Both AirWater Corporation and Millennium Electric TOU Limited have signed a joint "Technology Transfer Agreement" with a newly formed local company set up specifically to manufacture AirWater Machines and PV Solar Energy Panels and related systems.

Story at: http://biz.yahoo.com/bw/040318/175996 1.html Universal Communication Systems: http://www.ucsy.com/

AirWater: http://www.airwatercorp.com/

Millennium Electric: http://www.millennium-electric.com/
AirWater, Australia: http://www.airwater.com.au/home.htm

3-18-04 Philippines, More on SunPower's Solar Cell Factory

Yesterday, SunPower Corporation announced the inauguration of its first high-volume manufacturing plant. SunPower Philippines Manufacturing Limited near Manila will initially produce 25 MW annually of high-efficiency silicon solar cells and is designed to allow future capacity expansion to more than 100 MW. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsASMA34.htm

and http://biz.yahoo.com/bw/040317/175955 1.html

SunPower: http://www.sunpowercorp.com/

Philippine STAR: http://www.philstar.com/philstar/News200403180716.htm

3-18-04 Northern Power Systems MicroGrid Grant

Senator James Jeffords is the featured speaker at a press event to recognize DOE funding for

development of Northern Power Systems proprietary MicroGrid(R) (MicroGrid® is a registered trademark of the Northern Power Systems) power network and other renewable energy initiatives in Vermont. Northern's MicroGrid(R) combines multiple devices, including PV, into the distribution network. Event highlights at: http://biz.yahoo.com/bw/040317/175819 1.html Some history:

http://uaelp.pennnet.printthis.clickability.com/pt/cpt?action=cpt&expire=&urIID=7437425&fb=Y&partnerID=1412

http://www.northernpower.com/pdf/pr microgrid.pdf

3-18-04 Moscone Center PV System Dedication (Susan DeVico)

Today, San Francisco Mayor Gavin Newsom will dedicate the Moscone Center's new 675 kW solar electric installation by PowerLight Corporation, the largest city-owned solar installation in the nation. Press release today. PowerLight Corporation: http://www.powerlight.com/

3-18-04 U.K., £2M Grant Awards for Solar Energy

UK Energy Minister Stephen Timms announced £2M grant awards for investment in solar energy projects throughout the UK. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUGO30.htm

3-18-04 Coverage of Lockheed's High-Altitude Airship/PV

This coverage of the thin-film contributions has some interesting links: http://slashdot.org/article.pl?sid=04/03/17/1849241

3-18-04 Additional Coverage of GE's Solar Interests

Said Anil Duggal, head of GE's light-energy conversion research program, "If you say you are doing renewables, and you are not doing photovoltaics, you are missing a huge part of it." Story at: http://www.taipeitimes.com/News/bizfocus/archives/2004/03/14/2003102455

3-18-04 U.S. FY 2005 Energy Appropriations

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04 Prepared testimony of Robert Card:

http://appropriations.house.gov/index.cfm?Fuseaction=Hearings.Testimony&HearingID=288&WitnessID=593

House Energy & Commerce, FY 2005 Budget Priorities for the Department of Energy, 4-1-04.

3-17-04 PV and Wind Turbine in DG Market

According to an ABI Research report, "Distributed Generation: Growth Projections for Fuel Cells, Photovoltaics, Wind Turbines, Reciprocating Engines, and Small Gas Turbines", wind turbine and PV companies experienced extraordinary sales and are expected to translate these sales into solid market share gains on the competition. Story at:

http://biz.yahoo.com/iw/040316/064430.html

ABI Research: http://www.abiresearch.com/

3-17-04 More on PowerLight Installations

More coverage of PowerLight installations, including Mayor Gavin Newsome at the San Francisco Moscone Center system dedication, can be found at:

http://eastbay.bizjournals.com/eastbay/stories/2004/03/15/daily16.html?jst=b In hl

3-17-04 Philippines, Solar Wafer Manufacturing

The \$300M solar wafer manufacturing plant inside the Laguna Technopark is being inaugurated.

Said Energy Secretary Vincent Perez Jr., "The \$300-million facility, the first of its kind in Asia, brings the Philippines at par with other countries because this plant will produce the world's highest-performance silicon solar cells." Initially some 8 million wafers will be produced annually, with production expected to increase to 48 million wafers by 2007, or 150 MW. Story at: http://www.abs-cbnnews.com/NewsStory.aspx?section=Business&OID=47155

3-17-04 Uni-Solar Ovonic Solar Cells to Lockheed Martin

United Solar Ovonic Corp. announced it has been awarded a contract by Lockheed Martin to develop and deliver solar cells on polymer substrates to be used by Lockheed Martin in Phase 2 of the High Altitude Airship program. Uni-Solar is working with aerospace companies to develop space and stratospheric PV products under contracts from the U.S. Air Force Research Laboratory. Story at: http://biz.yahoo.com/prnews/040317/dew012 1.html Uni-Solar: http://www.uni-solar.com/

3-17-04 Spire Corporation 35th Anniversary

Today, Spire Corporation celebrates the 35th Anniversary of its founding. Said Roger G. Little, President and CEO, "The year 2004 marks Spire's 35th anniversary, a tribute to our perseverance and adaptability to market shifts and technology change. While the path of technology commercialization has rarely been smooth, Spire has accomplished much. For example, our innovations in developing semi-automated solar module assembly equipment have changed the business model of the worldwide photovoltaic industry to one of distributed manufacturing. We have installed 150 solar factories in 42 countries enabling the development of what is estimated to be a \$4 billion industry worldwide....". More regarding Spire's accomplishments highlighted at: http://biz.vahoo.com/bw/040317/175650 1.html

3-17-04 Hitachi Solar Cells

Referenced, but have not found the story on public sites: Hitachi Unveils Dye-Sensitized Solar Cell For Everyday Use (Subscription, Nikkei Interactive, March 17 04:34)

3-17-04 Universal Communication Systems / Millennium Electric PV Order

Universal Communication Systems Inc. subsidiary Millennium Electric TOU announced a new export purchase order of US \$680,000 for their Photo Voltaic Solar Panels and Products to Maass Regenerative Energien GmbH. Story at:

http://biz.vahoo.com/prnews/040317/flw013 1.html

Universal Communication Systems Inc.: http://www.ucsy.com/ Millennium Electric TOU: http://www.millennium-electric-inc.com/

3-17-04 India, Solar Electrification for Lakshadweep

By the middle of next year, grid-interactive PV power plants put up by Bharat Heavy Electricals Ltd will contribute over 1 MW or 20% of the island group of Lakshadweep's total power needs. Under an Rs 21.22-crore project supported by the Ministry of Non-conventional Energy Sources, BHEL is putting a solar plant on each of the 11 inhabited islands. Story through Solarbuzz at: http://sify.com/finance/equity/fullstory.php?id=13431412

3-17-04 Renewable Generation Information System

The Western Governor's Association and the California Energy Commission are working together to develop a Western Renewable Generation Information System (Western states). Highlighted at ReFocus, News-in-Brief, 3-10-04: http://www.re-focus.net/

Web link: http://www.westgov.org/wieb/wregis/

3-17-04 U.S. FY 2005 Energy Appropriations

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-16-04 Isofoton http://www.isofoton.com/lazo.htm

Hoy todos nos sentimos víctimas. Hoy es un día de dolor para todos. Desde ISOFOTON, queremos expresar a todos los familiars y amigos de las víctimas de los terribles atentados de ayer 11 de marzo, nuestra solidaridad. Desde nuestro compromiso con una sociedad democrática y en paz.

3-16-04 Kyocera Solar Power Generation System / Multicrystal Silicon Solar Module Kyocera Corporation announced a new standard-type solar power generation system, Solar Power Plant III, to be released in April. The system comprises solar modules and a power conditioner. Kyocera has developed a new module with 13.98% conversion efficiency allowing increased output while maintaining the same outside dimensions as that of the conventional Kyocera model. Kyocera Press: http://global.kyocera.com/news/2004/0303.html

3-16-04 Extended Product Warranty for Thin Film Module

Mitsubishi Heavy Industries now offers a 5-year product guarantee, going beyond the 2-year statutory requirement, for the MA100 thin-film module. In addition to the 20-year performance guarantee of 80% of the minimum output, MHI is now guaranteeing 90% output of minimum nominal performance over the first 10 years. Phonix SonnenStrom AG has promoted the MA100 module since May 2003, and "is pleased to offer this major bonus to its customers". Story at

Solarbuzz: http://www.solarbuzz.com/News/NewsEUPT17.htm

Mitsubishi: http://www.mhi.co.jp/power/e_a-si/index.html

Phonix SonnenStrom AG: http://www.sonnenstromag.de/index.html

3-16-04 World Renewable Energy Congress VIII and Expo (Robert J. Noun, Chairman, U.S. Organizing Committee)

The 8th Congress and Expo will be held in Denver, Colorado 28 August through 3 September 2004. The Congress continues to gain significant interest from around the world, with over 800 abstracts from 60 countries received to date. The Honorable Herman Scheer, member of the Bundestag and President of Eurosolar, will speak at the opening ceremony. More on the major speakers and special events planned at: http://www.nrel.gov/wrec/

3-16-04 Dedicating YourVitamins' PV System (Susan DeVico)

Nevada's Senator Harry Reid and others joined with YourVitamins Inc. to dedicate Nevada's largest solar electric system at 215 kWp, designed and installed by PowerLight Corporation. [PowerLight Press Release] Solarbuzz story:

http://www.solarbuzz.com/News/NewsNAPR345.htm

PowerLight: http://www.powerlight.com/company/press-releases/index.shtml

3-16-04 U.S., Energy Information Agency Call for Comments (Kevin Eber)

The EIA is soliciting comments on the proposed revision and 3-year extension to the FORM EIA-63A "Annual Solar Thermal collector Manufacturers Survey" and EIA-63B "Annual Photovoltaic Module/Cell Manufacturers Survey". Comments must be filed by May 10, 2004. For more information, see pdf at: http://www.eia.doe.gov/oss/EIA-63A-B-March9-2004.pdf

3-16-04 Fronius Inverters

Fronius USA Solar Electronics Division announced it received eligibility listing for 2 state-level incentive programs. The FRONIUS IG 3000, IG 2000, and IG 2500-LV grid-tied inverters have qualified for the California Energy Commission eligibility listing for the Emerging Renewables

Program Rebates as well as the New York State Energy Research and Development Authority's PV funding programs. Story at Solarbuzz: http://www.fronius.com/worldwide/usa.solarelectronics/about/index.htm

3-16-04 SolarOne Products (Jackie Abramian)

SolarOne announced the availability of its new Harvest-Store(tm) Data Logger, particularly for offgrid and educational solar electric applications. It monitors basic energy flows within a system, and serves as a low-cost tool for troubleshooting, sizing and optimization, and is useful for solar energy experiments and teaching. SolarOne also has the logger as an add-on for the Harvester(tm) solar electric generators. [SolarOne Press Release] SolarOne: http://www.solarone.net/ and http://www.solarone.net/advancespecs/

3-16-04 More on U.K. Solar Sound Barrier

More information on the 11 kWp, 50-m solar sound barrier, with photo, can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=6297

3-16-04 Training for Rural Electrification with PV

In an EU-funded project that just ended, Fraunhofer ISE cooperated with partners to develop a training package for companies and organizations that deal with stand-alone power supplies. See the pdf, and other news under Press Releases at: http://www.ise.fraunhofer.de/english/press/index.html

3-16-04 More on Terry Jester's Award, Shell Solar

See Shell Solar Press at:

http://www.shell.com/home/Framework?siteId=shellsolar&FC2=/shellsolar/html/iwgen/news_and_library/press_releases/2004/zzz_lhn.html&FC3=/shellsolar/html/iwgen/news_and_library/press_re_leases/2004/jester_1603.html

3-16-04 U.S., Energy Appropriations FY 2005 - Hearings

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-15-04 AstroPower Asset Sale

AstroPower, Inc. announced that the US Bankruptcy Court presiding over AstroPower's Chapter 11 proceeding approved the sale of most of AstroPower Inc.'s US business assets to General Electric Company's designee Heritage Power LLC. The sale price was \$15 million cash plus assumption of certain liabilities. Story at: http://biz.yahoo.com/bw/040312/125487 1.html AstroPower: http://www.astropower.com/

See New York Times article at:

http://www.heraldtribune.com/apps/pbcs.dll/article?AID=/20040313/ZNYT01/403130678/1200/BUSINESS

More information at: (may need to cut & paste link)

http://www.delawareonline.com/newsjournal/local/2004/03/13gespurchaseofas.html

3-15-04 On the GE Research Environment:

http://www.boston.com/business/technology/articles/2004/03/15/ges sandbox for scientists/

3-15-04 Germany, Largest Solar PV Plant in the World

Secretary of Environment for Saarland, Stefan Moersdorf, announced the largest PV plant in the world at 7.4 MW, which will be ground-mounted at the former Gottelborn mine site in Saarland.

City Solar AG will be the installer of some 50,000 solar modules over an area of 165,000 square meters. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR146.htm
City Solar AG: http://www.city-solar-ag.de/

3-15-04 California Solar Forum

A California Solar Center - Solar Forum is scheduled for 5 May in San Francisco. Agenda: "A celebration of the 50th anniversary of the Invention of the Silicon Solar cell, Information on proposed California solar and renewable energy legislation for 2004, program updates (CEC, SelfGen, other California utility programs), solar schools, who owns green tags?, some cool new options for realtime performance monitoring, turnkey - no money down - shared savings contracts are here, Is it time for Performance-based incentives in California?, policy options for solar in the new home construction market Plus an opportunity to network with others involved in the solar industry."

Registration and information at: http://www.californiasolarcenter.org/reg_forum-may2004.html
Solar Center: http://www.californiasolarcenter.org/index.html

3-15-04 More on Rodney Strong Vineyards PV System - Largest in the World of Wine The largest solar-powered system in the wine world comprises 4,032 panels at the 100,000 square foot barrelhouse. Story at: http://biz.yahoo.com/prnews/040315/nyfnsp01 1.html

3-15-04 Whistler Investments, Inc. Update

WHSL has entered into an agreement to acquire rights to various technologies including worldwide rights to an advanced Lithium/Solar Power System technology for application to residential and commercial properties. The company is restructuring to put in place 3 divisions; the Solium Power Corp will hold the rights for the advanced Lithium/Solar Power System. More on the company developments, including The Lithium Solar House at: http://biz.vahoo.com/pz/040315/54172.html

3-15-04 WorldWater Chairman's Strategic Thinking

Quentin T. Kelly, Chairman and CEO of WorldWater Corp., has contributed a section to the book "Inside the Minds: The Green Company", to be published in May 2004. The book features CEOs on the benefits and economic rewards of operating an environmentally conscious company. Story at: http://biz.yahoo.com/bw/040315/155153 1.html

3-15-04 Borrego Solar

Borrego Solar completed installation of a 37-kW system for the Hacienda Mobile Home Park of Barstow, in the Mojave Desert region of southern California. Story at Solar Access: http://www.solaraccess.com/news/story?storyid=6286

3-15-04 Germany, World Renewable Energy Forum

The World Council for Renewable Energy is organizing the 2nd world renewable energy forum entitled "Renewing Civilization by Renewable Energy" to take place in Bonn, Germany 29-31-May 2004. More information at: http://www.world-renewable-energy-forum.org/2004/index.htm

3-15-04 Terry Jester, Shell Solar Award (Tina Nickerson)

Terry Jester, senior director of engineering and operations for Shell Solar, was recently honored with the Outstanding Engineering Achievement Merit Award from the San Fernando Valley Engineers Council. Jester has more than 24 years in the solar industry and is responsible for manufacturing operations, technical development, and product development for Shell Solar in the U.S. [Shell Solar Press Release]

3-15-04 Canadian Renewable Energies Directory

Surplus copies of the 2004 version of the Canadian Renewable Energies Directory are available for purchase at: http://renewables.ca/bq-sale.html

3-15-04 U.S., Energy Appropriations FY 2005 - Hearings

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-12-04 Arizona Solar Legislation

Legislation for a commercial and residential 25% solar tax credit - HB2613 - (with a property tax exemption) in Arizona has passed out of committee in the House and now goes to the floor for a vote. Another renewable energy bill - HB2526, Solar electricity - is also ready to go to a floor vote. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6285

3-12-04 ISET Enhanced Award

In February 2004, ISET was awarded an enhancement to the existing Air Force SBIR contract (High Efficiency Non-Vacuum Processed Thin-Film Photovoltaics), which nearly doubles the existing funding. http://www.isetinc.com/news.html

3-12-04 IREC News

For news on a range of topics from interconnection standards to state renewables activities, see the Interstate Renewable Energy Council Newsletters at: http://irecusa.org/

3-12-04 Solar Cells and Panels for Space

Additional coverage of Boeing's selection of EMCORE to provide advanced triple-junction high-efficiency solar cells and panels for the latest model 702 satellite can be found at SpaceDaily: http://www.spacedaily.com/news/solarcell-04d.html

EMCORE: http://www.emcore.com/

Coverage of the multi-million euro contract for supply of solar array panels between Mitsubishi Electric Corporation and Alcatel Space is at: http://global.mitsubishielectric.com/

3-12-04 U.S. FY 2005 Budget Resolutions (Energy & Environment Daily, subscription)

This morning the Senate passed an \$821 billion FY 2005 budget resolution, which sets spending limits for appropriations. It allows \$33 billion more for discretionary funding than in FY 2004. An amendment passed that reinstates the energy savings performance contract program. The House is also working on a budget resolution, and Republicans have proposed \$819 billion. A compromise budget resolution is yet to come, followed by an analysis of amendments and discretionary spending limits for individual agencies. [S.Con.Res.95]

3-12-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-11-04 Q-Cells New 8" Cell

Q-Cells AG is introducing its new product innovation, the 8" high-performance PV cell made of multi crystalline silicon. It will be launched in the first quarter of 2005. Press at: http://www.q-cells.com/2 eng.php

3-11-04 Sharp Solar Advertising Campaign

Sharp Electronics Corporation will launch an advertising campaign to generate interest in solar energy in California, beginning this month. The ads will target homeowners who are seeking ways

to reduce energy consumption while supporting clean air and renewable energies. More on the campaign at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO192.htm and SolarAccess: http://www.solaraccess.com/news/story?storyid=6268

Sharp: http://www.sharpusa.com/solar/SolarLanding/0,2286,,00.html?

3-11-04 Kyocera's SAMURAI BBS Announcement

Ten years ago, Kyocera Corporation released the first domestic solar power generation system in Japan. To commemorate the 10th anniversary, Kyocera Solar Energy Division is offering SAMURAI BBS, a domestic solar power generation system with exclusive specifications, from March 11 to April 10 - limited to the first 100 buildings applicants. More at:

http://www.japancorp.net/Article.Asp?Art ID=6788

Kyocera: http://global.kyocera.com/news/2004/0302.html

3-11-04 U.K., Solar Sound Barrier

The UK's first solar motorway sound barrier - on the M27 - is an 11 kWp, 50-m long system installed by solarcentury for the Highways Agency and will generate about 9,500 kWh of electricity each year. Said Dan Davies, director of engineering at solarcentury, "We are pleased to have worked with CORUS Building systems to develop the two installation systems. One uses standard modules and the other is based on unique "peel and stick" solar technology which is simply bonded to the aluminum sound barrier, both suited to a wide range of construction applications." Press at: http://www.solarcentury.co.uk/news/newsitem.jsp?newsid=375

3-11-04 Xantrex Developments

Xantrex Technology Inc. has developed a 100 kW 3-phase utility interactive inverter for the European market. Says Andreas Vondung, Managing Director of Xantrex in Europe, "We are excited to use our extensive experience with megawatt PV installations to introduce a new product in Europe where the adoption rate of renewable energy systems is so high." Initial units of the GT100E have been produced at the Xantrex facility in Livermore, California. The company plans to transfer manufacturing to Europe in 2004. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPT16.htm

Xantrex: http://www.xantrex.com/index.asp

Xantrex Technology expects to raise \$67 million when it is listed on the TSE next month. This and other news from the Canadian Association for Renewable Energies, Bill Eggertson, at: http://www.renewables.ca/main/main.php

3-11-04 American Solar Energy Society Board and Chair (Brad Collins)

Four new members for the ASES Board of Directors have been selected for a 3-year term. New Board members are Marion Barritt, Paul Notari, Don Osborn, and Blanche Sheinkopf. Tom Starrs, Vice President of Marketing and Sales for the Bonneville Environmental Foundation, is Chairman. And, Dave Renne was elected as one of 3 ASES representatives on the International Solar Energy Society Board. [Source: ASES Press Release]

3-11-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

House Appropriations, Energy & Water, DOE, 3-11-04

Spencer Abraham's Testimony:

http://appropriations.house.gov/index.cfm?Fuseaction=Hearings.Testimony&HearingID=287&WitnessID=532

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-10-04 First Solar Receives \$5 Million (Paula Vaughnn)

First Solar has received \$5 million of funding from the State of Ohio. Proceeds, in the form of a low-interest loan, will be applied to the expansion project underway to increase manufacturing capacity fourfold - from 6 MW in 2004 to 25 MW in 2005. First Solar has earmarked the loan proceeds to purchase machinery and equipment that will help the company achieve high-volume, low-cost manufacturing capabilities and improve production processes. Press release from First Solar: http://www.firstsolar.com/index.html

3-10-04 More on New Mexico's Clean Energy Legislation

Governor Bill Richardson signed legislation making it mandatory for utilities to source a certain percent of their energy from renewable energy sources. The Renewable Portfolio Standard requires the state's major utilities to derive 10% of the electricity they sell from renewable sources by 2011. Details at SolarAccess: http://www.solaraccess.com/news/story?storyid=6267

3-10-04 Strategies Unlimited Solar Flare on PV (Paula Mints)

In its Solar Flare Newsletter, due out at the end of March, Strategies Unlimited announces shipments of 684.61-MWp, a 35% increase in shipments over 2002's total of 507.65-MWp. Continued strong growth is likely for 2004, due to programs in Germany, Japan, the United States, and other countries around the world. Strategies will be publishing its demand side report on Global PV markets in April, and a comprehensive report on manufacturer shipments for 2003, in May. Strategies Unlimited: http://www.strategies-u.com

3-10-04 Solarbuzz Reports World Solar PV Energy Market Growth

World solar PV market installations soared to 574 MW in 2003 representing growth of 34% over 2002 according to the annual PV market report issued today by Solarbuzz Inc. The 140-page Marketbuzz 2004 report analyzes key trends in the PV industry in 2003, includes the annual survey of solar energy installers, and a detailed review of price movements in major markets, concluding with implications of the 2004 solar cell supply / demand forecast. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO191.htm

Marketbuzz 2004: http://www.solarbuzz.com/Marketbuzz2004-intro.htm

3-10-04 SunViewer.net Renewable Energy Database (Matt Arner)

Heliotronics, Inc. has launched SunViewer.net(tm), a renewable energy database that takes data uploaded from renewable energy sites around the country and allows users to access it from the Internet. In addition to viewing data from individual sites, the database is able to aggregate multiple systems into one output. The system can store power and energy data as well as meteorological data from any site that has an Internet connection and a compatible data acquisition system. For more information, visit http://www.Heliotronics.com or contact Matt Arner, Heliotronics Business Development Manager at

marner@heliotronics.commarner@heliotronics.com.

http://www.Heliotronics.com/products/product SunViewerNet.html

3-10-04 POWER-GEN Renewable Energy

The first POWER-GEN Renewable Energy Event has been hailed as highly successful, attracting more than 900 attendees and 69 exhibitors for the 3-day conference and exhibition. POWER-GEN Renewable Energy 2005 is scheduled for 1-3 March 2005 in Las Vegas, Nevada. Story at: http://biz.yahoo.com/prnews/040309/datu031 1.html

3-10-04 Australian Business Council for Sustainable Energy Conference (Bob McConnell) The BCSE National Conference - Sustainable Energy 2004 - will be held at the Sydney Convention Centre as part of Enviro 04, 29-31 March 2004, with site visits on 1 April. The

program includes "Developments in Solar PV and Thermal Applications and Technologies." For a program and registration, see: http://www.bcse.org.au/

3-10-04 Senator Bingaman on the U.S. Energy Bill

With the comprehensive Energy Bill stalled, Senator Bingaman makes a case for looking to a smaller set of key, broadly supported, and effective energy provisions and to enact them either individually or in small packages. Press at:

http://bingaman.senate.gov/Press Files/Press by Date/Press Release/press release 0.html

3-10-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-9-04 Arrowhead Research Corporation Nanotech Subsidiary

Arrowhead Research Corporation announced it has entered into an agreement to form a new majority-owned subsidiary to commercialize an ultra-thin crystal film (nanofilm) technology developed by Dr. Harry A. Atwater and others at the California Institute of Technology. The technology enables fabrication of high-quality single crystal semiconductor and oxide, nanometer thickness films as surface layers transferred onto low-cost substrates. Information at: http://biz.yahoo.com/prnews/040309/nytu097 1.html

3-9-04 Sharp Solar Products

Sharp Electronics Corporation announced a range of installations using solar modules manufactured at Sharp's U.S. solar panel manufacturing facility in Memphis, Tennessee. The plant opened 5 months ago, and current annual capacity is 20 MW. Notable Sharp projects underway or planned are highlighted in this article at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAMA36.htm

Sharp: http://www.sharpusa.com/solar/SolarLanding/0,2286,,00.html?

3-9-04 EMCORE Triple-Junction Solar Cells

EMCORE announced it has been selected by Boeing to provide advanced triple-junction high-efficiency solar cells and panels for the latest model 702 satellite which Boeing is manufacturing. Story at: http://www.stockhouse.com/news/news/news.asp?tick=EMKR&newsid=2188889

3-9-04 California, More on Rodney Strong Vineyards' Solar Electric System

This California winery now has a 766 kW PV electric system provided and installed by PowerLight. Said Dan Shugar of PowerLight Corporation, "We're delighted that Rodney Strong is setting such a wonderful example for the wine industry by deploying reliable, environmentally-responsible and cost-effective solar power." Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6254

PowerLight: http://www.solaraccess.com/marketplace/compdetail?compid=531

PG&E Self-Generation Incentive Program: http://www.pge.com/selfgen/

3-9-04 More on New York's Solaire, Building Integrated PV System (Jim Hoelscher)

New York City's Solaire, a 30-story \$100 million building, features 33 kW of PV systems, energy efficiency lighting, and energy-saving appliances. Says Anthony Pereira, president of Altpower, Inc., "It's a high-profile building in the solar world. Solar is not the cheapest product per square foot, so if you're going to put it on a building, why not have it work as your building's façade to bring down the cost." Story and photo at:

http://ecmweb.com/ar/electric_photovoltaic_systems/index.htm

3-9-04 Clean-Energy Market

According to a new report released by Clean Edge, Inc., solar, wind, and fuel cells are poised to grow from a \$12.9 billion industry today to \$92 billion by 2013. "Clean Energy Trends 2004" examines factors that are influencing clean-energy markets and tracks 5 key trends. The report also profiles companies that are spearheading each of the 5 trends, including PowerLight Corp. Story at: http://biz.yahoo.com/bw/040309/95121_1.html
Report at:

http://www.centreforenergy.com/outsideNav.asp?href=http%3A%2F%2Fwww%2Ecleanedge%2Ecom&template=3,3

3-9-04 Contacts Process for Si Solar Cells (Example of News in III-Vs Review)

Scientists at the Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, have developed an inexpensive process allowing highly efficient solar cells to be produced from extremely thin silicon wafers. Story at: http://www.three-fives.com/WZ/III-Vs/competitive_news/news/000081/show/

3-9-04 Minnesota Renewables RFP

Split Rock Energy in Minnesota issued a request for proposals for future power supply resources. The RFP seeks both renewable and conventional resources. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6250
RFP Information:

http://www.greatriverenergy.com/press/news/030304rfp for future power sup.html

3-9-04 Moving Toward Zero Energy Affordable Housing (Steve Hogan)

The Claretian Associates are building highly energy-efficient homes on the south side of Chicago. Twelve of the 25 new homes in South Chicago will have PV systems, with technical assistance on the PV panels from Spire Solar. The first two homes with PV panels have been completed, and the homes are being monitored by Steven Winter Associates, Inc., with funding from DOE's Zero Energy Homes program. [Home Energy, March/April 2004] Home Energy: http://www.homeenergy.org

For more information on Claretian Associates, visit http://www.claretianassociates.org

3-9-04 California, Chico Solar Power

Chico finance officials are looking at multi-million dollar solar power facilities at three sites. Story through Solarbuzz at:

http://www.chicoer.com/Stories/0,1413,135%7E25088%7E2003456,00.html

3-9-04 Renewables Manufacturers Directory (Amy Cole, Research & Markets)

A directory listing over 1,100 manufacturers of renewable energy systems products is available. See Web Site: http://www.researchandmarkets.com/reports/53037/

3-9-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

3-8-04 Isofoton Enters the U.S. Market

Isofoton sees significant opportunity in the North American PV market. The Madrid-based company will enter the U.S. market through a partnership with Energy Outfitters. Said Isofoton North America CEO Javier Gorbeya, "With partners like Energy Outfitters and an understanding of the rapid growth in the PV market in the US and all over the world, we are aggressively growing our production capacity from 36 MW last year to 45 MW this year and expect to grow into our new 100 MW factory in the near future." Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6244 http://www.solaraccess.com/news/story?storyid=6243

Isofoton: http://www.isofoton.com/

Energy Outfitters: http://www.energyoutfitters.com/

3-8-04 Uni-Solar Order for PV Panels

United Solar Ovonic LLC announced it has received an order for 1.25 MW of PV panels from Sunset Energietechnik GmbH (Sunset) of Germany. Sunset has also signed a letter of intent to purchase 5 MW of UNI-SOLAR(R) (UNI-SOLAR® is a registered trademark of the United Solar Ovonic LLC) products over the next 24 months. Story at:

http://biz.yahoo.com/prnews/040308/dem017 1.html

Uni-Solar: http://www.uni-solar.com/

3-8-04 Karl W. Boer - Solar Energy Medal of Merit (Bonnie Johnston)

Nominations are invited for the Karl W. Boer - Solar Energy Medal of Merit. The medal will be awarded to an individual who has made significant pioneering contributions to the promotion of solar energy as an alternate source of energy through research, development, or economic enterprise, or to an individual who has made extraordinary valuable and enduring contributions to the field of solar energy in other ways. Nominations must be received before September 1, 2004. See: http://www.udel.edu/iec/KWBmm.html

3-8-04 World PV Cell / Module Production

Paul Maycock's March 2004 issue of PV News (subscription) provides the latest figures for world PV cell / module production, coming in at 742.28 MW for 2003 of which 104.22 is U.S. Production in Europe and Japan boomed. Details, and more news, at PV News. PV News email: pves@pvenergy.com. Home page: http://www.pvenergy.com. Phone/fax: 540-349-4497.

3-8-04 Strong Growth for Solar PV

Power generation from PV in the U.S. will grow by 28.8% over the next 2 decades according to a new report by the U.S. Department of Energy. Story at: http://www.powerpulse.net/cgi-bin/displaystory new.pl?id=10221

3-8-04 WorldWater Corp. \$1M of Equipment

WorldWater Corp. announced it will ship \$1M of PV equipment this month to the job site at Cerro Coso Community College in Ridgecrest, California. The equipment includes solar modules from Sharp Electronics, inverters, combiner boxes, isolation transformers and electronic components. The project design consists of 6-1/2 acres of ground-mounted solar modules and a concrete building for equipment and lab space. Story at: http://biz.yahoo.com/bw/040308/85182 1.html WorldWater: http://www.worldwater.com/

3-8-04 Germany, SOLON AG Module Assembly Production

SOLON AG reported that it produced and sold 11.3 MW in 2003, compared with 5.3 MW the previous year, and anticipates that module production in 2004 will be between 20 and 25 MW. Information at Solarbuzz: http://www.solarbuzz.com/News/NewsEUCO118.htm SOLON AG: http://www.solonag.com/english/index.htm

3-8-04 Hawaii, Fuel Bill Prompts Re-focus on Renewables

Kauai's Island Utility Cooperative officials are hopeful that better efficiency and the use of alternative energy resources may help offset future hikes in electric bills. Story at: http://www.kauaiworld.com/articles/2004/03/06/news/news02.txt

3-8-04 The "Green" Way to Fight Job Loss in the U.S.

Per this article, "This election season should elevate us past defensiveness to a grand debate on how the United States anticipates the inevitable decline of fossil fuels, pushes an imaginative array of sustainable-development technologies, and uses the process to generate millions of new jobs for Americans." See http://www.commondreams.org/views04/0302-05.htm

3-8-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

House Appropriations, Interior & Related Agencies, Energy Conservation 3-24-04

3-5-04 Massachusetts, More on Brockton's PV Plans

The Massachusetts city of Brockton is planning a 500 kW solar PV array, to include as many as 6,720 solar panels. The project was spearheaded by the Massachusetts Technology Collaborative, which administers the state's public benefits fund, the Renewable Energy Trust. Spire Solar was involved in conducting the feasibility study. The vendor for the array has not yet been selected. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6236 MTC: http://www.mtpc.org/netmac.asp

3-5-04 Rodney Strong Vineyard PV System

At a dedication ceremony today, Pacific Gas and Electric Company is presenting to Rodney Strong Vineyards a rebate check in the amount of \$2,164,403 for the rooftop mounted PV electric system recently installed by PowerLight Corporation. Story and photo at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR343.htm

PG&E Self-Generation Incentive Program: http://www.pge.com/selfgen/

PowerLight: http://www.powerlight.com/

3-5-04 New Mexico, Renewables Bill

Governor Richardson signed into law a measure that says 10% of retail sales by electric utilities must come from renewable energy by 2011. More at:

http://www.kobtv.com/index.cfm?viewer=storyviewer&id=9079&cat=ENVIRONMENT http://www.lcsun-news.com/artman/publish/article 5045.shtml

3-5-04 Life Cycle Analysis of Solar Modules - The "Waste" Challenge (Rebekka Mattyasovszky)

The Workshop on Life Cycle Analysis and Recycling of Solar Modules - The "Waste" Challenge, will be held 18-19 March 2004 in Brussels, Belgium. Programme and Registration Form at the Events Calendar:

http://www.irc.cec.eu.int/default.asp@sidsz=more_information&sidstsz=press_releases.htm

3-5-04 U.K., London Mayor's Renewables Program

Said Mayor Ken Livingstone, "A city as vast as London consumes an enormous amount of energy. We must work towards generating more of our own renewable energy". "London's energy use will be transformed if we can get solar power into all major new developments," said the mayor's cabinet advisor on environment. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6229

3-5-04 Introduction to Solar PV, The Technology and Industry (Amy Cole)

This new report outlines the technology, industry, and applications of solar photovoltaics. Information at Research & Markets: http://www.researchandmarkets.com/reports/41562

3-5-04 U.S., Energy Appropriations FY 2005 - Hearings

Senate Appropriations, Energy & Water, DOE, 3/3/04

David Garman's prepared testimony:

http://appropriations.senate.gov/hearmarkups/record.cfm?id=218625

Senate Appropriations, Interior & Related Agencies, DOE, 3-4-04

Spencer Abraham prepared testimony:

http://appropriations.senate.gov/hearmarkups/record.cfm?id=218701

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

House Appropriations, Interior & Related Agencies, Energy Conservation 3-24-04

3-4-04 CrystalClear Consortium (Conny Ruitenburg-Tazelaar)

A consortium of 9 companies, 3 universities, and 4 research institutes will develop innovative manufacturing technology for crystalline silicon solar modules. The development will be carried out under the name CrystalClear as one of the first Integrated Projects co-financed by the European Community through the thematic priority "Sustainable Energy Systems" of Sixth Framework Programme for Research. See press release.

3-4-04 WorldWater Corp Solar Technology at Expo

WorldWater Corporation announced it will participate in the Destination Baghdad Expo with its Iraqi partner The Sandi Group, and will exhibit the company's proprietary solar technology, AquaMax(TM) (AquaMaxTM is a trademark of the WaterWorld Corporation). Story at: http://biz.yahoo.com/bw/040304/45094 1.html

3-4-04 WorldWater: http://www.worldwater.com/

3-4-04 Utility Energy Forum (Guy Nelson)

The Utility Energy Forum has announced the agenda for its 24th Annual meeting 5-7 May 2004 in Tahoe City, California. This year's meeting includes a pre-Forum workshop and a breakout session on Renewable Energy Technologies and Tradeable Renewable Certificates. For more information, see: http://www.utilityforum.com/

3-4-04 Southern States Power-SunAmp Agreement with NativeSUN

Southern States Power Company, Inc. announced that its subsidiary, SunAmp Power, has reached an initial agreement to acquire 24% of NativeSUN, a Native American solar energy company with offices in Arizona and Colorado. Story at:

http://biz.yahoo.com/pz/040303/53616.html

SunAmp: http://www.sunamp.com/ Native SUN: http://www.nativesun.biz/

Southern States Power: http://www.sspowerco.net/

3-4-04 Evergreen Solar 4th Quarter and Year End 2003 Results

Commented Richard M. Feldt, President and Chief Executive Officer, "Evergreen Solar completed the \$29.5 million private equity financing in May 2003 and is on track to expand manufacturing capacity fourfold. During the second half of 2003, we made tangible progress on our Line 2 capacity expansion. By February 2004, at least the first piece of new equipment for each process step has been installed, with the remainder of the equipment to be phased in over the course of the year. Since revenues have been capacity limited, this expansion should enable significant revenue growth in 2004 and should further improve our product gross margins." Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO190.htm

3-4-04 Solar Silicon Conference (Karsten Albers)

Strategies to avoid a shortage of raw material in the rapidly growing solar electricity industry will be addressed at the 1st Solar Silicon Conference 22 April 2004 in Munich, Germany. The 1-day event is organized by PHOTON International - the Photovoltaic Magazine. See press release.

3-4-04 Accra, Ghana, Isofoton Aids Rural Electrification

Isofoton is aimed at supplying electricity to more than 6,000 people through design, supply, installation, commissioning, and maintenance of more than 2,500 solar PV systems in various regions of the country under the Solar Rural Electrification Phase 2. Story at: http://allafrica.com/stories/200403020298.html

3-4-04 U.S., Energy Appropriations FY 2005 - Hearings (subject to change)

Senate Appropriations, Energy & Water, DOE, 3/3/04

David Garman's prepared testimony:

http://appropriations.senate.gov/hearmarkups/record.cfm?id=218625

Senate Appropriations, Interior & Related Agencies, DOE, 3-4-04

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

House Appropriations, Interior & Related Agencies, Energy Conservation 3-24-04

3-3-04 XsunX Research

XsunX announced that recent research has provided the basis for some breakthroughs. XsunX anticipates being able to provide a wider range of optical transmittance filtering capabilities. The Company's management believes that XsunX glazing will provide more versatility to manufacturers for its use in many applications where traditional PV cannot compete. The attributes of transparency, flexibility, light weight and lower manufacturing costs may provide XsunX licensees access to the design of diverse product groups that span and interconnect the architectural glass, optical film and energy markets. Story at:

http://biz.yahoo.com/pz/040303/53609.html

XsunX: http://www.XsunX.com/

3-3-04 Q-Cells Venture Capital

Germany's Q-Cells AG has raised EUR12.5 million (\$15.6M) in third-round financing and will use the funds to expand its production capacity. Story at:

http://www.thedeal.com/NASApp/cs/ContentServer?pagename=TheDeal/TDDArticle/StandardArticle&c=TDDArticle&cid=10779191033&r=InFs&p=M4YD5AR1

3-3-04 Massachusetts, Brockton \$1.7M for Solar Energy Facility

Funding from the Massachusetts Technology Collaborative was awarded to the city for construction of a solar energy facility. The \$1.7M project will be constructed at the 27-acre site owned by Bay State Gas. Said Rob Pratt, director of the Renewable Energy Trust, "This is very big. It is the largest investment we've ever made in a photovoltaic solar site." Story through Solarbuzz at: http://enterprise.southofboston.com/articles/2004/03/02/news/news/news/news02.txt

3-3-04 Universal Communication Systems / Millennium International Licensing Agreement Universal Communication Systems, Inc. subsidiary Millennium Electric T.O.U. Inc. announced they have concluded negotiations, signed a memorandum of understanding, and entered into an international licensing agreement with Capsolair S.A., a Moroccan company, to establish a manufacturing facility to exploit their Photo Voltaic (PV Multi-Solar System (MSS) technology. Story at: http://biz.yahoo.com/prnews/040303/flw002 1.html

Universal Communication Systems: http://www.ucsy.com/ Millennium: http://www.millennium-electric-inc.com/

3-3-04 Westar Energy Renewables RFP (Green Power Network)

Westar Energy Inc.'s RFP for up to 200 MW of Renewable Energy, with a notice of intent to respond due by March 9, can be found at:

http://www.wr.com/corp_com/contentmgt.nsf/publishedpages/rfp%20north Green Power Network: http://www.eere.energy.gov/greenpower/home.shtml

3-3-04 Honda's Solar Plans (Photon International)

Honda so far has not decided whether it will commercialize its solar thin-film product, per a spokesperson at Honda R&D Europe GmbH in Offenbach, Germany. However, the board has approved money for R&D and feasibility studies for its CIGS project in 2004. Currently the company operates a 2.8MW production line at Honda Engineering Co. Ltd.'s research facilities in Tochigi prefecture. This and more news at Photon International: http://www.photon-magazine.com/photon/news/20ap%20sn%20Honda.htm

3-3-04 Mitsubishi Electric Solar Panel Contract

Agreement on a multi-million euro contract for supply of solar panels was reached between Mitsubishi Electric Corporation and Alcatel Space in mid-February. Mitsubishi will supply the solar panels for Alcatel Space's Spacebus. Story at: http://biz.yahoo.com/bw/040303/35256 1.html Mitsubishi Electric: http://global.mitsubishielectric.com/

3-3-04 Support for Renewables / Energy Efficiency (Ken Bossong)

In a letter delivered to members of the U.S. Senate Budget committee, the Sustainable Energy Coalition is calling for a FY 2005 budget resolution "that will make possible robust funding levels for the renewable energy and energy efficiency programs in the budgets of the U.S. Department of Energy, U.S. Environmental Protection Agency, U.S. Department of Agriculture, and other federal agencies." Source: electronic newsletter, Sustainable Energy Coalition March 3.

3-3-04 Nanotech Conference

Penton Media and the NanoBusiness Alliance announced details of it conference program for the 3rd annual NanoBusiness 2004, to be held 17-19 May 2004 in New York City. Topics include "Nanotech and the Environment - From advanced solar panels to water filtration ...". Information at: http://biz.yahoo.com/bw/040303/35384_1.html

Conference Web Site: http://www.nanobusiness2004.com/

3-3-04 Energy Appropriations FY 2005 - Upcoming Hearings (subject to change)

Senate Appropriations, Energy & Water, DOE, 3/3/04

Senate Appropriations, Interior & Related Agencies, DOE, 3-4-04

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

House Appropriations, Interior & Related Agencies, Energy Conservation 3-24-04

3-2-04 Universal Communication Systems / Millennium \$1.7M Order

Universal Communications Systems, Inc. subsidiary Millennium Electric TOU Limited company president Ami Alazari announced, "Through our contacts in Europe, we have successfully secured a major export purchase order in the total amount of USD \$1.7 million for our Photo Voltaic (PV) Solar Panels and Products to Maass Regenerative Energien GmbH, a large solar energy customer in Germany. This substantial export order is a major breakthrough for the

company, and opens new opportunities for us to market our OEM Photo Voltaic (PV) Solar panels, products and systems to the European market." Story at:

http://biz.yahoo.com/prnews/040302/fltu016 1.html

Maass: http://www.maass-solar.de/

Universal Communication Systems: http://www.ucsy.com/ Millennium Electric: http://www.millennium-electric-inc.com/

3-2-04 ARISE Developments

ARISE Technologies Corporation announced it has entered into a stock purchase agreement to acquire all the outstanding shares of Dankoff Solar Products Inc. of Santa Fe, New Mexico. In addition, ARISE announced the signing of a collaboration agreement with Komag, Inc. to pursue the commercialization of the ARISE patented PV technology currently under development at the University of Toronto. Said ARISE President and CEO Ian MacLellan, "Komag's expertise with respect to thin-film-based products and processes will greatly enhance the development of our photovoltaic technology." Story at: http://www2.ccnmatthews.com/scripts/ccn-release.pl?/current/0302051n.html

3-2-04 Missouri, Schools Go Solar

The Missouri Energy Center and AmerenUE are partnering to bring solar power and education to K-12 schools. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR341.htm Missouri Solar Schools Program: http://www.dnr.mo.gov/energy/renewables/solar-schools.htm

3-2-04 California, More on Marin County PV with RWE Schott

A public dedication of the RWE Schott Solar PV array will take place on March 3 and will feature Dr. Donald Aitken as the guest speaker. More at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6212

RWE Schott Solar: http://www.solaraccess.com/marketplace/compdetail?compid=1418

Prevalent Power: http://www.prevalentpower.com/

3-2-04 More on Mitsubishi Electric Stand-Alone PV Electricity Generation System

More information on the March 1 announcement of the PV generators can be found at:

http://www.japancorp.net/Article.Asp?Art_ID=6694

Mitsubishi: http://global.mitsubishielectric.com/

3-2-04 Sustainable Energy "Sunergy 5" Power Inverter

Sustainable Energy Technologies Ltd. announced the launch of "SUNERGY 5", a wall-mounted 5kW inverter for the grid-connected North American solar power market. Information at: http://www2.ccnmatthews.com/scripts/ccn-release.pl?/current/0302098n.html
Sustainable Energy Technologies: http://www.SustainableEnergy.com/SET-home/index.html

3-2-04 Energy Appropriations FY 2005 - Upcoming Hearings (subject to change)

Senate Appropriations, Energy & Water, DOE, 3/3/04

Senate Appropriations, Interior & Related Agencies, DOE, 3-4-04

House Appropriations, Energy & Water, DOE, 3-11-04

House Appropriations, Energy & Water, Renewable Energy, etc. 3-17-04

House Appropriations, Interior & Related Agencies, Energy Conservation 3-24-04

3-1-04 The Paul Rappaport National Renewable Energy and Energy Efficiency Award

The National Renewable Energy Laboratory (NREL) launched the Paul Rappaport National Renewable Energy and Energy Efficiency Award two years ago in celebration of the Lab's 25th anniversary. The award is named for NREL's pioneering first director and honors outstanding

efforts to advance renewable energy and energy efficiency technologies. The award coordinator is currently accepting applications for the 2004 award -- nomination forms can be downloaded at the Rappaport Award web site http://www.nrel.gov/rappaport award/. Nominations must be received by April 2, 2004. For more information, contact Janet Fried, Award Coordinator, at 303-275-3098 janet fried@nrel.gov.

3-1-04 New Mexico Solar Energy

Governor Bill Richardson plans to use \$3M as seed money for work on a project to use sunshine to generate electricity on a commercial scale. The goal is to attract \$20M to build one or more solar energy plants somewhere in the state. The governor plans to establish a task force to identify a site by the end of 2004. Story at: http://www.miami.com/mld/miamiherald/8048453.htm

3-1-04 SunPower Corp. Solar Cell Efficiency

SunPower Corp. announced that its A-300 silicon solar cell had been measured at 21.5% efficiency by NREL. Said Richard King, Team Leader for the photovoltaics subprogram at the U.S. Department of Energy, "SunPower's advancements in developing highly-efficient solar cells and modules are commendable. The achievement of a 21.5 percent efficient solar cell demonstrates that SunPower's unique back-side contact technology can be utilized to manufacture cost-effective products that improve the versatility of solar-electric power systems." Said Tom Werner, SunPower CEO, "This efficiency world record constitutes an important milestone for SunPower and confirms the significant performance advantage of our product." Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT65.htm

http://biz.yahoo.com/bw/040227/275121 1.html SunPower: http://www.sunpowercorp.com/

3-1-04 Konarka's Management Team (Joe Romano)

Konarka Technologies Inc. announced that Dr. Bill Beckenbaugh has been appointed as the Chairman of Konarka's Scientific Advisory Council. Beckenbaugh led Konarka through its initial phase to establish a foundation to commercialize and bring breakthrough PV technologies and products to market. Howard Berke, Chairman and CEO, will direct Konarka's team with Daniel Patrick McGahn, Executive Vice President and Chief Marketing Officer, and Randolph W. Chan, Executive Vice President of Operations, Manufacturing, and Engineering. Press at: http://www.konarkatech.com/news_press.php

3-1-04 Mitsubishi Electric's New Modules

Mitsubishi Electric launched 2 new solar modules directed toward international markets. Mitsubishi will market 2 polycrystalline modules, one at 120 Watts with 13% efficiency, and another at 110 Watts with 11.9% efficiency, both with lead-free solder design. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPT21.htm

Mitsubishi: http://global.mitsubishielectric.com/bu/solar/index.html

3-1-04 California, Marin's Solar Electric System

The Marin County Public Works Department's solar electric system, provided and installed by Schott Solar Inc. and Prevalent Power Inc., is operational. The cost of the \$662K project was offset by \$233.12K in loans from the state Energy Commission, and a \$324K rebate from Pacific Gas and Electric Company's self-generation incentive program. Story through Solarbuzz at: http://beta.kpix.com/news/bcn/2004/02/26/n/HeadlineNews/COUNTY-POWER.html

3-1-04 New York Renewables Portfolio Standard (Highlighted in SEIA Newsletter)

New York State's Public Service Commission has released the Cost Study Report II on the Retail

Renewable Portfolio Standard. Download at:

http://www.dps.state.ny.us/03e0188 CostStudy II.htm

3-1-04 Sunpowered Roof Tile

A new range of roof tiles called the Suntile has been launched by Sunpowered. Story through PV-

UK at: http://pv-uk.org.uk/news/news.php?id=127&page=detail

PV-UK: http://www.pv-uk.org.uk/news/conferences.html

3-1-04 SCHOTT Solar Energy Products

A 26 January 2004 article on SCHOTT products can be found at: http://pv-uk.org.uk/news/news.php?id=124&page=detail

3-1-04 NIST Advanced Technology Program Proposal Kit

The NIST Advanced Technology Program has a comprehensive ATP Proposal Preparation Kit (booklet) dated February 2004. See http://www.atp.nist.gov.

3-1-04 Comprehensive Energy Bill

See Jesse Broehl's update on the "Leaner Energy Bill" at SolarAccess: http://www.solaraccess.com/news/story?storyid=6198

3-1-04 Renewable Energy Budgets

ASES speaks to the US Renewable Energy RD&D Program budgets in SolarAccess at: http://www.solaraccess.com/news/story?storyid=6202

3-1-04 Renewable Energy Technologies: Global Developments

This study evaluates solar, wind, geothermal, wave, and hydrogen sources of renewable energy. For more information see: http://biz.yahoo.com/bw/040301/15218 1.html

3-1-04 Applied Cost Modeling on Web

Wright Williams & Kelly announced the latest edition of the E-Zine "Applied Cost Modeling" is now available on its web site under the newsletter link. E-Zine is dedicated to manufacturing cost reduction and productivity improvements. Information at:

http://biz.yahoo.com/bw/040301/15825 1.html

WWK: http://www.wwk.com/

3-1-04 Million Solar Roofs Bulletin

Please note: The MSR Team Bulletin referred to last week is specifically for the MSR team (and partners).

3-1-04 Energy & Water Appropriations, FY 05

The Senate Appropriations Energy and Water Subcommittee will hold a hearing on March 3 to examine the proposed budget estimates for FY 2005 for the Department of Energy's Office of Science, Office of Nuclear Energy, and Office of Energy Efficiency and Renewable Energy. The House Appropriations EWD hearing is scheduled for March 11.

FEBRUARY

2-26-04 SatCon's PV System UL Certification

SatCon Technology Corporation announced that its PowerGate AE-PV 50-kW PV Power Conversion System has been UL-1741 certified. United Solar Ovonics (Uni-Solar) has agreed to use SatCon as its preferred supplier for 50-kW and 100-kW PCSs for commercial PV systems worldwide. Story at: http://biz.yahoo.com/bw/040226/265043_1.html

SatCon: http://www.satcon.com/

2-26-04 WorldWater Distribution Agreement

WorldWater Corp. announced it has entered into an agreement with Water Tech Ag Supply who will initially sell WorldWater's solar irrigation and solar farming systems to its customer base in Southern California. Story at: http://biz.yahoo.com/bw/040226/265028 1.html

Agricultural Supply: http://www.agsupply.com/

World Water Corporation: http://www.worldwater.com/

2-26-04 California, Community College District \$1M+ Incentive

The Los Angeles Community College District received an incentive of more than \$1M from the LA Department of Water and Power for an innovative solar generation system recently installed at Pierce College in Woodland Hills. The incentive was presented as part of LADWP's Solar Incentive Program. Story at: http://biz.yahoo.com/bw/040225/255996 1.html

2-26-04 California RPS

Documents available for the upcoming stakeholder workshop on Renewable Portfolio Standards include two reports on "California Renewable Portfolio Standards Integration Cost Analysis". The reports can be downloaded from: http://www.energy.ca.gov/portfolio/documents/index.html

2-26-04 PV Activities in Japan (Resources Total System Co., Ltd)

The February 2004 issue of PV Activities in Japan (subscription) includes a table showing historical and planned PV annual production capacity for major Japanese players, with two in the 100-300 MW range and two moving toward the 100+MW scale in the near future. This and much more information is available in the monthly newsletter through Resources Total System Co., Ltd., Tokyo, email: ikki@rts-pv.com, fax +81-3-3553-8954.

2-26-04 Hawaii, Maui's Biggest Solar Power System

Island Dodge is expanding it solar power system to be a 52.2 kW array, the largest solar electric system on Maui. Story through Solarbuzz at:

http://pacific.bizjournals.com/pacific/stories/2004/02/23/daily46.html

2-26-04 Million Solar Roofs Team Bulletin

MSR's inaugural issue of the MSR Team Bulletin February 27 covers solicitations, new products, publications, meetings, and news articles of interest. Contact: jaima mellor-lindquist@nrel.gov MSR: http://www.millionsolarroofs.com/

2-26-04 Florida, School PV Systems

The SunSmart schools program is a statewide initiative to install 29 solar electric systems in schools throughout the state. See recent developments at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR338.htm

2-26-04 Xantrex IPO

Information on the Xantrex Technology Inc. IPO can be found at:

http://www.globeandmail.com/servlet/ArticleNews/TPStory/LAC/20040226/RYOUNG26/TPBusiness/TopStories

2-26-04 Texas, Here Comes the Sun (Craig Cox)

In December, Austin announced its intention to become the clean energy capital of the world. Says this article, "Austin is betting there will be a profitable sweet spot at the intersection of energy grids, digital networks, chip fabs, and solar panels. It reasons that developing innovative technology is the best way to find fat profit margins that won't be offshored overnight." Story at Wired: http://www.wired.com/wired/archive/12.03/view.html?pg=4

2-26-04 Ghana Investment in Solar Technology

The government "would" invest between 20 and 25 million cedis to promote solar PV technology in rural areas under the Ghana Poverty Reduction Strategy and the Renewable Energy Road Map for Ghana. More in the story through Solarbuzz at:

http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=52472 (100 GHC Ghana Cedis = 0.0112939 USD)

2-25-04 Ohio, Solar Panel Plant

Said Ken Zweibel, NREL, at a noontime program at the Toledo Club, Toledo is home to one of the world's top solar panel plants. The area's manufacturing legacy and prowess contributed to production advances that are establishing First Solar LLC, with operations in Perrysburg Township, as a leader in the field. Story at:

http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20040225/BUSINESS03/402250327

2-25-04 Green Pricing Program Reports

Two new reports on utility green pricing programs are available on line from the Lawrence Berkeley National Laboratory and the National Renewable Energy Laboratory. For more information, and links to the reports, see SolarAccess: http://www.solaraccess.com/news/story?storyid=6177

2-25-04 U.K., Solar Panel Noise Barriers

Solar panels installed along the highway are part of a 12-month Highways Agency and Transport Research Laboratory pilot scheme to use noise barriers as solar energy sources. Story at: http://www.portsmouthtoday.co.uk/ViewArticle2.aspx?SectionID=455&ArticleID=744984

2-25-04 Harvester Mobile Water Purifier (Jackie Abramian)

SolarOne(TM) (SolarOneTM is a trademark of the Systems Design and Technology) Solutions Harvester(TM) (HarvesterTM is a trademark of the SolarOneTM Solutions) Mobile Water Purifier will be featured on 26 February at a New York City event. The event will launch 1st Rochdale Cooperative's "One Village at a Time" program, 10am, 465 Grand St. in Manhattan. SolarOne: http://www.solarone.net/

1st Rochdale Cooperative: http://www.1stRochdaleNYC.coop/

2-24-04 Konarka Licenses DuPont IP (Joe Romano, HighGround)

Konarka Technologies, Inc., has licensed intellectual property from DuPont Electronic & Communication Technologies to compliment Konarka's organic PV program. The license also gives Konarka access to certain IP originally developed by the University of California. Said Howard Berke, Chairman, Konarka Technologies, "This significant licensing agreement broadens Konarka's technology platform and uniquely positions the Company to take advantage of nanotechnology developments in both dye-sensitized cells and polymer cells. Hybrid cells offer the best of both worlds. Gaining access to intellectual property about hybrid cells further enables

Konarka to deliver on its vision of bringing flexible, lightweight, low cost photovoltaics to market." Konarka Technologies: http://www.konarka.com/news press.php

2-24-04 More on Green Oasis

First National Power Corp appointed Walter Patterson as Project Manager for the Green Oasis Project, and Chris Baumgartner of SatCom Communications to develop the Telecom Communications Module for the GO Program Telephony Unit. Green Oasis delivers a turnkey power, clean water and telecom communications infrastructure in a single portable unit, and comes powered by renewable energy from wind and solar. Story at:

http://biz.yahoo.com/bw/040224/245311 1.html

First National Power: http://www.firstnationalpower.com/

2-24-04 Renewables Progress

In an article in SolarAccess RE Insider, Michael Eckhart reviews Europe's remarkable progress in renewables, including impacts of a key meeting in Berlin, and proposes how the U.S. might respond. Story at: http://www.solaraccess.com/news/story?storyid=6159

2-24-04 More on Scottish Enterprise Renewables Report

More on this report on the future of renewables can be found at the Website: http://tinyurl.com/39ehh

2-24-04 Solid-state Lighting Solicitation

A notice of intent to issue a funding opportunity announcement on Solid State Lighting Core Technologies" can be found at: http://tinyurl.com/2yqla and http://www.netl.doe.gov/ssl/funding opp.html

2-23-04 Charis Energy Solar Panel Pricing

Charis Energy Development, Inc., a subsidiary of Aquentium, Inc., announced the company has set the pricing for their newly invented solar panel at \$2.50 per Watt. Said Aquentium President Mark Taggatz, "Our pricing strategy is designed to allow affordable solar energy on a world-wide scale...". Story at: http://biz.yahoo.com/prnews/040223/lam115 1.html
January article: http://biz.yahoo.com/prnews/040105/lam052 1.html

2-23-04 Million Solar Roofs Solicitation

The Department of Energy is announcing its intention to solicit applications from State and local partnerships under the Million Solar Roofs Program. Highlighted in Platts Inside Energy (subscription), Federal Register Notice at: http://tinyurl.com/2j8vx Million Solar Roofs: http://www.millionsolarroofs.com/

2-23-04 Universal Communication Systems "Consortium Agreement"

Universal Communication Systems, Inc. subsidiary Millennium Electric T.O.U. announced it has been awarded a Euro 1 million (\$1.3M) Consortium Agreement by the Commission for the European Community in the framework of the Cooperative Research Program for ongoing development of the "Multi Solar System Roof Tile, etc." within the framework of the project known as "Development of an Integrated Solar System for Buildings." Story at:

http://biz.yahoo.com/prnews/040223/flm010 1.html

Europa: http://europa.eu.int/

Millennium: http://www.millennium-electric-inc.com/home.html

2-23-04 Advent Solar at Venture Symposium

Sixteen technology companies, including Advent Solar, will present at this year's Equity Capital

Symposium 11-12 May. The annual Technology Ventures Corp. event provides startup companies a chance to present their products to potential investors from all over the world. The symposium is designed to help commercialize technologies, including those that have originated from national laboratories and research institutions in New Mexico, Nevada, and California. Story at: http://tinyurl.com/2syzb

2-23-04 Green Tags Brokerage on West Coast

Evolution Markets launched brokerage services from its new office in San Francisco, California for the national green tag and West Coast regional compliance renewable energy and emissions trading markets. Said Peter Zaborowsky, Managing Director, "Having a local presence on the West Coast should enhance our ability to serve the voluntary market for renewable energy certificates." Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6155 Evolution Markets: http://www.evomarkets.com/

2-23-04 WorldWater Chairman Address to Investors

Quentin T. Kelly, Chairman and CEO of WorldWater Corp. will address the Institutional Investor Forum 2004 conference 25 February in New York. Information at:

http://biz.yahoo.com/bw/040223/235263 1.html

WorldWater: http://www.worldwater.com/

2-23-04 Carmanah PV Lighting Orders

The Aviation Lighting Division of Carmanah Technologies Inc. surpassed the \$1 million mark in orders for the first 49 days of 2004. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR337.htm

Carmanah: http://www.solarairportlights.com/

2-23-04 Tucson, Arizona Solar Option

The Arizona Corporation Commission approved a new pricing option on solar systems from Tucson Electric Power, reducing the average cost by about \$660. Story at CNN Yellowbrix: http://tinyurl.com/yq2bk

2-23-04 Energy Conversion Devices Operating Results

Energy Conversion Devices announced its operating results for the 2nd quarter ending December 21, 2003. The company's net loss was \$13.4 million, compared to a loss of \$5.8 million in the same quarter last year. The company is engaged in a number of negotiations and discussions to fund its operations, including forming new strategic alliances to fund and grow its PV, fuel cell, and other businesses and raise additional capital through equity and debt financing. And, it is engaged in negotiations with government agencies for contracts to fund its development activities. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO185.htm Energy Conversion Devices:

http://www.ovonic.com/news_events/5_2_press_releases/20040217.htm

2-23-04 Basel Agency for Sustainable Energy Call for Projects

BASE has made a call for projects for its 5th International Investment Forum for Sustainable Energy to be held 1-2 June 2004 as part of the Sustainable Energy Finance event organized by BASE, UNEP and UNEP Finance Initiative in conjunction with the International Conference for Renewable Energies in Bonn, Germany. BASE is looking for projects or business ventures from the renewable energy and energy efficiency sector that have reached a stage where 3rd party financing is required to enter and penetrate the market and expand their activities. Information at: http://www.energy-base.org/forum04/

This and more international news in the: GVEP Newsletters http://www.rsvp.nrel.gov/asp/newsletter search.asp

2-23-04 £25 Billion a Year on Renewable Energy

The amount of money spent globally on renewable energy is expected to grow to £25 billion a year by 2007 according to a study commissioned by Scottish Enterprise. Also 44% of the forecasted £90 billion spent between 2004 and 2007 is expected to be in Europe. http://tinyurl.com/3dkl3

2-23-04 India, Solar Power Plants

Jaipur: Rajasthan Electronics and Instruments has an Rs 11 crore order from Rajasthan Renewable Energy Corporation for 10-kW solar power plants in 27 villages in 7 districts of the state. Story through Solarbuzz at: http://economictimes.indiatimes.com/articleshow/496974.cms

2-23-04 Indonesia, Solar Home System

The Solar Home System, an individual solar electric power unit, will be installed in 2,750 homes that are without electricity services in 13 remote regencies throughout Indonesia. Story through Solarbuzz at: http://tinyurl.com/yqq9u

2-23-04 Antireflection Coating Patent and Tests

Scientists at the Institut fur Nichtmetallische Werkstoffe of the Technical University of Clausthal have succeeded in applying a practical and functional antireflection coating, which increases the light transmission of the glass tubes in parabolic-trough solar collectors by up to 7%. Story at: http://www.eurekalert.org/pub releases/2004-02/tuc-acf022004.php

2-20-04 SMA America a Zero-energy Business

SMA America announced the installation of a 21.6-kW PV system on their headquarters in Grass Valley, California, which makes the company a zero-energy business. The system comprises 12 1800U SMA America Sunny Boy inverters and 192 solar modules. Story at:

http://www.solarbuzz.com/News/NewsNAPR336.htm

SMA: http://www.sma-america.com/index.asp

Upcoming SMA Training: http://www.solaraccess.com/news/story?storyid=6137

2-20-04 NIST Advanced Technology Program Proposers' Conferences

For more information on the conferences for the solicitation, see:

http://www.atp.nist.gov/atp/proposers.htm

2-20-04 Zero-energy Homes

According to a report by the Florida Solar Energy Center, "Field Evaluation of Efficient Building Technology with Photovoltaic Power Production in New Florida Residential Housing", ... "energy efficient housing incorporating utility integrated PV power can reduce total electrical consumption by 70 percent or more over traditional housing". Story at: https://tinyurl.com/38gna

2-20-04 Roof-top PV in TEAM program, Canada

Roof-top PV panels in Canada's first solar-powered community will test a new galvalume substrate material that may reduce costs and increase long-term durability of solar systems. Four solar systems are being installed with funding from the federal TEAM program and using Uni-Solar's amorphous BIPV. This and other news from the Canadian Association for Renewable Energies (Bill Eggertson) at: http://www.renewables.ca/main/main.php
ARISE News, Solar Neighborhood 2-12-04: http://www.arisetech.com/

2-20-04 Tonga Solar PV System

Toyota Tsusho will assess the economics of using solar on the island of Tonga in the South Pacific, and selling the CO2 emission credits under the Kyoto Protocol's Clean Development Mechanism. The study is being conducted with Showa Shell Sekiyu, which would supply the PV panels, and Chubu Electric Power. See News-in-Brief at ReFocus 2-18-04: http://www.re-focus.net/

2-20-04 U.S. Congress, Upcoming Energy Budget Hearings (Subject to Change)

February 26, 10am, House Appropriations, Interior & Related Agencies, Secretary of Energy.

March 11, 10am, House Appropriations, Energy & Water Development, Department of Energy.

March 17, 10am, House Appropriations, Energy & Water Development, Renewable Energy.

March 24, 10am, House Appropriations, Interior and Related Agencies, Energy Conservation.

2-19-04 Global Solar Thin-Film Solar Module Efficiency

Global Solar Energy has built a large-area solar module with 10.7% efficiency, claiming the most efficient flexible thin film module ever built on a production line. The module was produced among a batch of PV material with an average conversion efficiency exceeding 10%. On the same production line, Global Solar has built cells with conversion efficiencies up to 12.5%. Said President Michael S. Gering, "Achieving these levels of efficiency from our cost-efficient production process validates Global Solar's decision to develop and commercialize this technology." Story at Solarbuzz: http://www.globalsolar.com/GLOBAL FLASH.htm

2-19-04 U.K. £5M for Solar Projects

The government announced about £5M of funding for new solar projects as part of the Major Photovoltaic Demonstration Programme. Story at:

http://www.greenconsumerguide.com/index.php?news=1717

Energy Saving Trust: http://www.est.co.uk/solar/

2-19-04 Darnell DG Report and PV

According to this article, "Over the past year or so, numerous companies have been shifting their focus to photovoltaics (PV). This has never been a large market, but it is the fastest-growing of the more common DG technologies, according to Darnell's 'Distributed and Cogeneration: Power Electronics' report." Story at: http://www.powerpulse.net/cgi-bin/pp pwrlines.pl?id=164

2-19-04 California, San Francisco Ordinance

City officials introduced new legislation to use the state's "Community Choice" law, in conjunction with the City's 2001 Voter-Approved solar "H Bond" Authority, to switch San Francisco to a new electricity supplier and build enough PV installations, wind turbines, efficiency and conservation installations, and hydrogen technologies to power 1/4 of the community with green power before the end of the decade. Supervisor Tom Ammiano announced this "Energy Independence Ordinance" with cosponsors on Tuesday. Story at:

http://www.commondreams.org/news2004/0218-05.htm

2-19-04 U.S. Department of Energy, Office of Science 20-Year Vision

The U.S. Department of Energy's Office of Science has released its Strategic Plan for basic research. The plan sets short-term (5-10 year) and long-term (10-20 year) scientific goals. For

more information see: http://tinyurl.com/275yd

Plan at: http://www.science.doe.gov/

Revisited...

2-19-04 FPL Solar Operations

150 MW (should be kW). Source story at: http://tinyurl.com/3gaa5
FLP Story: http://www.fpl.com/news/2004/contents/04012.shtml

2-19-04 IREC News

The latest newsletter from the Interstate Renewable Energy Council has many news articles on renewable energy programs, updates on Million Solar Roofs, upcoming events, etc. See: http://irecusa.org/

2-19-04 Million Solar Roofs Farm Bill Link

See the Farm Security and Rural Investment Act of 2002 (the Farm Bill) section on renewable energy through the link at: http://tinyurl.com/2xxhp

2-19-04 U.S. Comprehensive Energy Bill

Senate leaders have agreed to consider a leaner version of the energy bill. Senate Republican and Democratic leaders reached agreement to bring the new bill (S. 2095) directly to the floor without committee consideration. Press at:

http://energy.senate.gov/news/rep_release.cfm?id=217948 http://energy.senate.gov/news/rep_release.cfm?id=218069

2-19-04 Capstone / First National Power "Green Oasis"

Capstone International Corp. / First National Power Corporation announced The GREEN OASIS concept, which will deliver a turnkey power, clean water, and telecom infrastructure in a single portable unit. The Green Oasis will come fully powered and ready to provide clean power generation through renewable energy from wind and solar technologies. Power will be stored in high-efficiency rechargeable lithium ion batteries. Story at: http://biz.yahoo.com/prnews/040217/sftu100 1.html

2-18-04 Konarka Technologies Receives \$6M Award from DARPA (Joe Romano)

Konarka Technologies, Inc., announced it has been selected by the Defense Advanced Research Projects Agency (DARPA) to receive a contract in excess of \$6 M for basic research in developing new materials for hybrid PV cells. Konarka will lead a consortium of academic and national laboratories to develop new materials for hybrid PV. Konarka will manage the contract and will share the award over 5 years with R&D partners including Arizona State University; the National Renewable Energy Laboratory; University of Delaware; University of Massachusetts, Lowell; and U.S. Army Soldier Systems Center in Natick, Massachusetts. Press Release: http://www.konarkatech.com/news-press-6m-darpa.php

2-18-04 Evergreen Files Objections with AstroPower Bankruptcy Court

Evergreen Solar, Inc. filed objections with the U.S. Bankruptcy Court regarding the pending sale of the assets of AstroPower, Inc. Said Richard M. Feldt, President and Chief Executive Officer of Evergreen Solar, "We have a potential interest in acquiring selected assets of AstroPower that will complement our String Ribbon Technology. Although no decision has been made whether to bid for any assets, we want to ensure that, if we submit a bid, we will do so on a level playing field." Press at: http://tinyurl.com/3ahth

2-18-04 More on AstroPower

See RE Insider perspectives on AstroPower at SolarAccess: http://www.solaraccess.com/news/story?storyid=6106

2-18-04 Kaneka's New PV Generation System

Japan-based Kaneka has developed a new PV generation system, equipped with a built-in insulator solar battery module. The company will deploy the systems at 4 of its plants and its subsidiary Kaneka Solar Tec and begin operation in March. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6119

2-18-04 Uni-Solar Ovonic 1-MW Order

United Solar Ovonic LLC announced it has received an order for 1 MW of PV panels from ThyssenKrupp Hoesch Bausysteme GmbH. The products will be used by Thyssen to address the expanding building-integrated PV market in Germany. Story at:

http://biz.yahoo.com/prnews/040218/dew005 1.html

Uni-Solar: http://www.uni-solar.com/products markets.html

2-18-04 India, Microsol Power Cells and Modules

Microsol Power is a cell and module manufacturer with a 6-MW manufacturing facility in Hyderabad, India. It currently supplies its mono-crystalline modules to more than 7 countries and is set to increase its customer base and manufacturing capacity to 12 MW by June 2004. These and other Microsol developments at Solarbuzz:

http://www.solarbuzz.com/News/NewsASPT20.htm

Microsol: http://www.microsolpower.com/

2-18-04 Workshop on PV Energy Incentive Programs 8 March 2004 (European Photovoltaic Industry Association)

The Gruppo Imprese Fotovoltaiche Italiane in cooperation with the European Photovoltaic Industry Association and the Mechanical Engineering Department of the Rome University are organizing an international workshop to present a scenario where the renewable energies, with special emphasis on PV energy, can contribute to the reduction of air pollution and favor the achievement of the Kyoto Protocol targets. The best experiences of the European Countries in the application of the feed-in tariff incentive program for the PV market will be covered during the workshop, as will new measures being drafted to support the production of electricity from PV energy. Additional information can be obtained from GIFI (Email: gifi@anie.it) and from EPIA (Email: epia@epia.org)

2-18-04 FPL Solar Operations

FPL Group Inc. is looking at sites where it can build 150 MW of solar operations as part of its new green power program. Story through Solarbuzz at: http://tinyurl.com/3gaa5

2-18-04 2004 Paul Rappaport Award

Nominations for the Paul Rappaport National Renewable Energy and Energy Efficiency Award are due by April 2, 2004. For more information, visit http://www.nrel.gov/rappaport_award/

2-18-04 Africa, Off-Grid Project Review

Johannesburg: The government is reviewing its off-grid renewable energy program after finding that it does not meet targets. The provision of electricity to remote areas, especially using solar energy technology, will be halted while the government seeks other sources of power. Story through SolarAccess at: http://allafrica.com/stories/200402130458.html

2-18-04 Altair Nanotechnologies Board

Altair Nanotechnologies announced it has appointed Dr. David S. King to its board of directors. Said King, Managing Partner at Advanced Technology Group, "The opportunity to join Altair's board of directors is truly exciting. Of all the nanoscience companies operating in this rapidly emerging market, Altair is among the best positioned to meaningfully deliver nanotechnology across multiple markets. I look forward to working closely with Altair's senior management ...". Story at: http://biz.yahoo.com/iw/040218/063234.html

Re-visited....

2-18-04 NIST ATP 2004 Competition

The U.S. Department of Commerce—National Institute of Standards and Technology—Advanced Technology Program has announced the 2004 competition for high-risk R&D funding. In fiscal year 2004, the ATP intends to hold only this single competition, which will close on April 14, 2004. See the web site for more information at: http://www.atp.nist.gov/

2-18-04 Arizona Corporation Commission and PV

The Arizona Corporation Commission approved an increase in the Environmental Portfolio Standard percentage to 1.1% of retail electricity sales by 2007. The EPS requires utilities to generate a percentage of their retail energy sales through solar and other renewable energy resources, 60% of which must come from solar-electric sources. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAGO158.htm

ACC Press: http://www.cc.state.az.us/news/pr02-11-04.htm

See information in this Solarbuzz article about upcoming workshops to address EPS funding levels, elimination of the EPS expiration date, restoration of demand-side management funding, and allocation of funding among various technologies. AriSEIA: http://www.arizonasolarindustry.org/

2-18-04 Jacksonville, Florida, Request for Proposals for 1-300 MW of Renewable Energy Generation

JEA electric system serves more than 360,000 customers in Jacksonville and parts of 3 adjacent counties. See: JEA RFP#JPS-073-04-Renewable Energy Generation, and Current Bid Openings at: http://www.bids@jea.com/business/services/publicnot/index.asp

Source: Green Power Network: http://www.eere.energy.gov/greenpower/home.shtml

2-18-04 California Energy Commission Notice of Workshops on PIER-EA

Information about the upcoming workshops for the PIER-EA grant program proposal solicitation can be found at: http://www.energy.ca.gov/pier/notices/2004-02-06 wrkshp notice.html

2-17-04 NIST ATP 2004 Competition

The U.S. Department of Commerce—National Institute of Standards and Technology—Advanced Technology Program has announced the 2004 competition for high-risk R&D funding. In fiscal year 2004, the ATP intends to hold only this single competition, which will close on April 14, 2004. See the web site for more information at: http://www.atp.nist.gov/

2-17-04 IREC News

The latest newsletter from the Interstate Renewable Energy Council has many news articles on renewable energy programs, updates on Million Solar Roofs, upcoming events, etc. See: http://irecusa.org/

2-17-04 Million Solar Roofs Farm Bill Link

See the Farm Security and Rural Investment Act of 2002 (the Farm Bill) section on renewable energy through the link at: http://tinyurl.com/2xxhp

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2-17-04 U.S. Comprehensive Energy Bill

Senate leaders have agreed to consider a leaner version of the energy bill. Senate Republican and Democratic leaders reached agreement to bring the new bill (S. 2095) directly to the floor without committee consideration. Press at:

http://energy.senate.gov/news/rep_release.cfm?id=217948 http://energy.senate.gov/news/rep_release.cfm?id=218069

2-17-04 WorldWater's 1-MW California College Solar Project

Construction has begun on the nation's largest college installation of a PV system. The 1-MW system is being installed at Cerro Coso Community College, Ridgecrest, California by the prime contractor, Contra Costa, Inc., of Bakersfield. WorldWater Corp. is the exclusive PV supplier.

Story at: http://biz.yahoo.com/bw/040213/135063 1.html

Also, coverage at: http://www.solarbuzz.com/News/NewsNAPR335.htm
WorldWater: http://www.worldwater.com/WW7.25.03/wwpages/wwhome.html

2-17-04 California Energy Commission Notice of Workshops on PIER-EA

Information about the upcoming workshops for the PIER-EA grant program proposal solicitation can be found at: http://www.energy.ca.gov/pier/notices/2004-02-06 wrkshp notice.html

2-17-04 Energy Outfitters Forums

Energy Outfitters will host a series of Renewable Energy Professional Technical Forums during the month of March. Information at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6101

Energy Outfitters: http://www.solaraccess.com/marketplace/compdetail?compid=623

2-17-04 Capstone / First National Power "Green Oasis"

Capstone International Corp. / First National Power Corporation announced The GREEN OASIS

concept, which will deliver a turnkey power, clean water, and telecom infrastructure in a single portable unit. The Green Oasis will come fully powered and ready to provide clean power generation through renewable energy from wind and solar technologies. Power will be stored in high-efficiency rechargeable lithium ion batteries. Story at: http://biz.yahoo.com/prnews/040217/sftu100 1.html

2-12-04 See note about yesterday's repeated NCPV Hotline edition at the end of this edition

2-12-04 Japan, Sanyo Electric Raises Solar Cell Production Capacity

Sanyo Electric Co. announced it would double its solar cell production capacity at its plant in Osaka Prefecture by January 2005. The company says the expansion will make it the second largest solar cell manufacturer in Japan. The increase will enable the Sanyo Group to reach an annual capacity of 133 MW. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsASMA33.htm Sanyo: http://www.sanyo.co.jp/koho/index e.html

2-12-04 Renewable Energy Caucus (Ken Bossong, Sustainable Energy Coalition)

In a February 12 letter, 78 business, environmental, consumer, religious, and energy policy organizations urged members of Congress to join the House Renewable Energy & Energy Efficiency Caucus. A similar letter will be delivered to the members of the Senate who have not yet joined. The House and Senate RE/EE Caucuses are non-legislative, bipartisan organizations created to promote greater awareness among members of Congress of the status and potential of renewable energy and energy efficiency technologies. Source: Sustainable Energy Coalition news.

Sustainable Energy Coalition: http://www.sustainableenergy.org/

2-12-04 U.S. House of Representatives Energy Committee

Joe Barton (Texas) is the new chairman of the House Energy and Commerce Committee, replacing Billy Tauzin.

2-12-04 DayStar Technologies Closes Initial Public Offering

DayStar Technologies, Inc., announced it has closed its initial public offering of 2.1 million units consisting of one share of common stock, one Class A redeemable warrant, and two Class B non-redeemable warrants. The units were priced and sold at \$5 per unit. These units began trading February 6 on the Nasdaq Stock Market under the symbol DSTIU. Net proceeds to the company will be about \$8.8 million, after estimated expenses and underwriting discounts for the offering. DayStar has developed a copper-indium-gallium-selenide solar cell, and is developing a high-volume manufacturing process. More about future activity at: http://biz.yahoo.com/prnews/040212/sfth079 1.html

2-12-04 Altair Nanotechnologies Presentation

Altair Nanotechnologies will be presenting on February 18 at the Roth Capital Partners 16th Annual Growth Stock Conference in Dana Point, California. President Rudi E. Moerk will discuss the Company's proprietary technologies for making nanocrystalline materials, and Altair's positioning and key differentiators. The company is currently developing materials with potential applications in pharmaceuticals, titanium pigment and metal, batteries, fuel cells, solar cells, advanced energy storage devices, thermal spray coatings, catalysts, cosmetics, and environmental remediation. More at: http://biz.yahoo.com/bw/040212/125029 1.html

2-12-04 Solar Power in Suburbia

Per this article, "In one of life's little ironies, solar power is gaining a toehold in the most unlikely of places - the world of SUVs, big-screen TVs, and two-fridge families - in the 'burbs. And if it can gain acceptance there, some analysts say, the technology is on the cusp of widespread acceptance". See review of solar in suburbia, including links to incentive programs, at: http://www.csmonitor.com/2004/0212/p14s02-sten.html http://www.dsireusa.org/

2-12-04 New York Renewables

The New York Independent System operator released a report stating that the integration of the amounts of intermittent renewable resources contemplated under the NY Renewable Portfolio Standard would not have a significant impact on the operation, reliability, or expense of New York's power grid. Information and link to report at SolarAccess: http://www.solaraccess.com/news/story?storyid=6072

2-12-04 California Energy Commission Workshop

The Renewables Committee of the CEC will conduct a workshop to solicit input on the costs of integrating renewables into California's electricity system, on February 20, 2004 in Sacramento. See the workshop notice, and link to "California Renewables Portfolio Standards Integration Cost Analysis, phase 1, at: http://tinyurl.com/3q9ks

2-12-04 Five Power Companies Commit to Clean Energy

Five electric power companies across the U.S. responded to a challenge from the World Wildlife Fund to become the first U.S. power companies to support a mandatory cap on carbon dioxide emissions and confirm their commitment to clean energy. More at CNN Yellowbrix: http://tinyurl.com/28nkn

2-12-04 Florida Power and Light Green Power

FPL's 3.6 million residential customers throughout Florida can sign up for cleaner energy through the company's Sunshine Energy(R) (Sunshine Energy® is a registered trademark of the Florida Power & Light Company) program. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR334.htm

Sunshine Program: http://www.fpl.com/home/services/contents/sunshine energy.shtml

2-12-04 California, Audubon Center Green Energy Design

The conservation organization's Audubon Center has received a Platinum Rating from the U.S. Green Building Council. The 5,023 square foot building is the first in Los Angeles to be entirely powered by on-site solar systems, functioning entirely off the grid. Said Christine Ervin, President and CEO of the U.S. Green Building Council, "In a city like Los Angeles, embracing sustainable design is one of the most responsible actions you can take. As a premier example of green architecture, the Audubon Center will provide inspiration and guidance for others looking to go green." Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6089

2-12-04 California, PG&E SelfGen PV Program Fully Subscribed

Noted in Solar e-Clips, PG&E's Self Generation Rebate Program, providing incentives of \$4.50/watt for PV projects larger than 30 kW, has fully subscribed available 2004 funding, and there's a waiting list. See In Brief section at:

http://www.californiasolarcenter.org/solareclips/solareclips.html

PG&E Self-Generation Incentive Program: http://www.pge.com/selfgen/

2-12-04 60 MW of Grid-connected PV in California

Also at Solar e-Clips, see the In Brief article about the amount of grid-connected PV that was installed in California in 2003, including a link to the PDF of Excel file at: http://www.californiasolarcenter.org/solareclips/solareclips.html

2-12-04 More in Spire Solar's PV System for Backup Power

Coverage, including photo, of the 38-kW array installed by Spire Solar Chicago for Chicago's Office of Emergency Management and Communications is at SolarAccess: http://www.solaraccess.com/news/story?storyid=6080

2-12-04 To our mail list: Yesterday, some of our recipients of the NCPV Hotline email received at least 3 copies of the email. Our computer center experts tell us that our email was "spoofed" twice yesterday, and the spoof came from a verizon.net email address. We stopped the emails for a time to track down the cause. If this happens again, we will certainly continue to look into it. Thanks to those who alerted us.

2-11-04 Spire Solar PV in Chicago

Spire Corporation announced that the Chicago Office of Emergency Management and Communications now has a 10-kW solar PV backup system in addition to the 38-kW system installed by Spire Solar Chicago in early 2002. A commercial battery system donated by ComEd stores the backup power supply. Said Executive Vice President and General Manager of Spire Solar, Steve Hogan, "Today, going without power even for a few minutes can cost millions. Solar backup is clean, quiet and low maintenance. Best of all, it supplies a reliable, sustainable source of power in the event of an emergency." Story at: http://biz.yahoo.com/bw/040210/105643_1.html Spire Solar Chicago: http://www.spiresolarchicago.com/index.html

2-11-04 Midwest Research Institute Contract Extension to Manage NREL

Midwest Research Institute in Kansas City, Missouri, has received a 4-year contract extension to manage and operate the U.S. DOE's National Renewable Energy Laboratory. MRI is teamed with Battelle Memorial Institute of Columbus, Ohio, to manage and operate the Lab. Press at: http://www.nrel.gov/news/press/2004/1104 contract extension.html

2-11-04 U.S., Comprehensive Energy Bill

According to reports in Platts Inside Energy (subscription), Senate Republicans decided Tuesday not to attach a revised energy bill to the transportation bill now on the Senate floor. Other options, including a leaner version of the bill, are on the table. More information is available on the regular newswires.

2-11-04 Carmanah Solar-powered LED Crosswalk

Carmanah Technologies Corporation is introducing the Model R820 Pedestrian Beacon, a solar-powered LED crosswalk signal, to the North American market. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT62.htm

More information at: http://www.roadlights.com/

more information at: international and internati

2-11-04 The Return of the Solar Cat Book

Try "look inside the book" for more on Jim Augustyn's latest book at: http://www.solarcat.com/bigblack/index.htm

2-10-04 Siemens Organic Solar Cells

Photo coverage of Siemens organic solar cells from January can be found at: http://tinyurl.com/ywnj9

2-10-04 New Jersey Renewables, Solicitation

The Office of Clean Energy within the Board of Public Utilities announced it is continuing its program to fund development of renewable energy businesses, renewable technologies, and market infrastructure in New Jersey. The program will be open to applicants that seek funding for research, business development, commercialization, and demonstration of innovative products or services that advance the delivery of renewable energy systems to the marketplace. More information and link to solicitation at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAGO157.htm

2-10-04 Requests for Proposals (Source: the Green Power Network)

PacifiCorp 1,100 MW Renewable Resource RFP (RFP 2003B) - Deadline March 9, 2004 http://www.pacificorp.com/Navigation/Navigation31203.html
Renewable Hawaii, Inc. Renewable Energy RFP - Deadline April 22, 2004 http://www.renewablehawaii.com/RenewableHawaii/home/
(PDF 525 KB) Download Arcobat Reader

2-10-04 Arizona Renewables

Today, the Arizona Corporation Commission will consider whether to stay with the original goal for the Environmental Portfolio Standard to provide 1.1% of electricity from renewables by 2007. See "Sunrise for Solar" in the Arizona Republic:

http://www.azcentral.com/arizonarepublic/opinions/articles/0209mon1-09.html

2-10-04 Colorado Renewables Standard

More on passage of the Colorado renewables bill in the House can be found at: http://www.coloradodaily.com/articles/2004/02/10/news/news03.txt

2-9-04 Spheral Solar, ATS Automation Systems 3rd Quarter Results

From the Press Release February 5: Solar Group achieved revenue growth of 46% to \$27.5 million compared to \$18.8 million a year ago, as the Company's Photowatt International operations benefited from strong demand in Europe. The Company also announced a four month delay in the start up of its first Spheral Solar(TM) (Spheral SolarTM is a trademark of the Automation Tooling Systems Inc.) Power manufacturing facility due to construction and development challenges, and a \$10 million to \$15 million increase in the total estimated start-up investment due to strategic decisions to internalize production of certain critical processes, reduce launch risks and make investments that are expected to facilitate future capacity expansion of the factory. "Spheral Solar(TM) Power is an ambitious project with tremendous value creation potential," said Mr. Woerner. "In spite of the delay and additional investments, we're making good progress on many fronts in the commercialization plan and continue to expect attractive returns from this major growth initiative! ." Information at: http://www.atsautomation.com/profile/news/2003/020504.htm

2-9-04 Process Technology for Thinner, Cheaper Solar Cells

Results from a joint project among Shell Solar, the Fraunhofer Institute for Solar Energy, and other research institutes, will feed into the development of a third production line of Shell Solar's solar cell factory in Gelsenkirchen. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUMA41.htm

2-9-04 More on Konarka's New PV Prototype

Additional coverage of Konarka's prototype flexible solar cell can be found at Solar Access:

Konarka: http://www.solaraccess.com/marketplace/compdetail?compid=885

2-9-04 7th Annual "Investing in the Alternative Energy Industry" Conference

The New York Society of Security Analysts will present its 7th Annual Investing in the Alternative Energy Industry Conference 25 February 2004 in New York. The conference will offer investment professionals the chance to listen in as top executives at leading alternative energy companies discuss the future of their industry and how their companies are positioned for growth and profitability. Story at: http://biz.yahoo.com/bw/040209/95713 1.html

2-9-04 Germany, Largest Solar PV Rooftop in Mainz

A new 1,800-square-meters solar PV system with a peak capacity of 222 kW was inaugurated in Mainz, Germany on the roof of the Kayser building. Juwi GmbH indicates it wants to combine roofing projects with solar electricity generation to establish a unique offer across Germany. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR139.htm
Juwi: http://www.iuwi.de/international/index.htm

2-9-04 Massachusetts, 130 New PV Systems Under Contract in 2003 (Jackie Abramian, JA Associates news brief)

Massachusetts communities boosted solar installations by 35% in 2003 with 130 new PV systems reported under contract, 63 of which are installed and operating. The increase in PV was made possible through the Massachusetts Renewable Energy Trust's Solar to Market Initiative, which provides grants for PV installations in Massachusetts. See more at Massachusetts Technology Collaborative Renewable Energy Trust:

http://www.mtpc.org/RenewableEnergy/Solar to Market.htm

2-9-04 California, PIER-EA RFP

The California Energy Commission's Public Interest Energy Research-Environmental Area (PIER-EA) Program is requesting proposals for research projects through its Environmental Exploratory Grant Program. The goal of the program is to support early development of promising, new scientific concepts that have the potential to impact the way we understand and/or address energy-related environmental issues. The program is made up of 6 subject areas, including renewable energy. Information at: http://www.energy.ca.gov/contracts/index.html#PIER

2-9-04 Pennsylvania, Energy Harvest Initiative

\$5M in Energy Harvest Grants will go to 32 recipients, and leverage another \$13M in private funds, to promote advanced energy technologies. Story at:

http://biz.yahoo.com/prnews/040209/phm010 1.html

http://www.dep.state.pa.us/

Related story: http://biz.yahoo.com/prnews/040209/phm009 1.html

2-9-04 FY 05 U.S. DOE EERE Budget Documents

Budget documents from DOE's Energy Efficiency & Renewable Energy Office can be found at: http://www.eere.energy.gov/office eere/budget.html. See related story on EERE FY 05 budgets at SolarAccess: http://www.solaraccess.com/news/story?storyid=6057

2-9-04 U.S., Comprehensive Energy Bill

E&E Daily (subscription) reports that either the renewable fuels title of the energy bill, or perhaps Senator Domenici's leaner version of the energy bill, may appear in Senate floor amendments to the Transportation Equity Act this week. The House strategy is likely to add the House version of the energy bill to the transportation bill.

2-9-04 Universal Communication Systems Agreement with Digital Light

Universal Communication Systems, Inc. announced that the company subsidiary Millennium Electric TOU Ltd has signed an agreement with Digital Light Inc. to develop lighting products using Super Bright LEDs energized by PV solar panels to be supplied by Millennium. Story at: http://biz.yahoo.com/bw/040209/85103 1.html

Digital Light: http://www.eDigitalLight.com/

Millennium: http://www.millennium-electric-inc.com/ Universal Communication Systems: http://www.ucsy.com/

2-9-04 PV in Oman

Australia-based Solar Sales recently completed a series of remote solar PV applications for the local telecommunications company Omantel. All systems used AstroPower AP-120, 120W modules. See story and photos at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6049

2-9-04 Million Solar Roofs Partnership, Northern Colorado

In Northern Colorado, the Million Solar Roofs partnership will be working to improve awareness of solar energy alternatives and to create a plan to remove political, economic and social barriers, which prevent residents from pursuing solar energy alternatives. Story at Solar Access: http://www.solaraccess.com/news/story?storyid=6055

2-9-04 Colorado Renewable Energy Standard (Craig Cox)

By a vote of 39-21, the Colorado House of Representatives this morning passed HB 1273, which establishes a renewable energy standard in Colorado. The legislation now moves to the Colorado Senate. More on HB 1273: http://www.newenergytechnologies.org/colorado/news/2004-1-28.htm

2-9-04 Mach One Agreement with SHEC Labs

Mach One Corporation has entered into an agreement with Solar Hydrogen Energy Corporation in which Mach One will commit to assist SHEC in securing up to \$10 million in development capital. SHEC's primary focus is to develop cost effective, clean and renewable processes to produce hydrogen from water using sunlight. SHEC Labs has developed a solar concentrator technology for its proprietary hydrogen process. Story at: http://tinyurl.com/2ba5o SHEC Labs: http://www.shec-labs.com/

2-6-04 Daystar Technologies

According to this February 3 article, DayStar Technologies Inc. expects to begin trading its stock in a unit offering that includes one share of common stock, plus Class A and B warrants. The DayStar offering should bring in from \$8.9M to \$13.1M, which the company says will be used for research and development, personnel expenses, capital equipment, and working capital. More details at: http://www.sacbee.com/content/business/story/8207282p-9138399c.html DayStar Technologies: http://daystartech.com/index.html http://daystartech.com/index.html

2-6-04 New Report, "Hydrogen Economy Offers Major Opportunities But Faces Considerable Hurdles"

According to a new National Academies Report, a transition to hydrogen as a major fuel in the next 50 years could significantly change the U.S. energy economy, reducing air emissions and expanding domestic energy resources, but technical, economic, and infrastructure barriers need to be overcome. Part of the press release on the report says, "The DOE program should accelerate development and early evaluation of carbon capture and storage technologies and

further investigate production methods that do not result in emissions, such as wind, the sun, and nuclear heat processes...". Press at:

http://www4.nationalacademies.org/news.nsf/isbn/0309091632?OpenDocument More at SolarAccess: http://www.solaraccess.com/news/story?storyid=6040

New York Times: http://tinyurl.com/ytxz4

2-6-04 Angola Solar Pilot

A \$250,000 pilot project demonstrating how solar energy can play a role in the reconstruction of rural communities has been launched in Angola. BP Solar will take its solar technology to the village of Paranhos in Bengo province and install solar panels to provide light and power. BP Solar will design, supply, and install the solar systems and teach villagers how to use and maintain the equipment. Story at:

http://www.miningweekly.co.za/min/news/breaking/?show=46456

2-5-04 ECD Management Shifts

Energy Conversion Devices, Inc., announced that Stanford R. Ovshinsky, Iris M. Ovshinsky, Robert C. Stempel, Umberto Colombo, Walter J. McCarthy, Jr., Florence I. Metz, and Stanley K. Stynes, all of whom are current directors, have been nominated for election to the Board of Directors. Also, the Board of Directors has named Robert C. Stempel, Chairman of ECD Ovonics since December 1995, to the additional position of Chief Executive Officer. Mr. Ovshinsky continues as President and was named to the new position of Chief Technology Officer. James R. Metzger continues his role of Chief Operating Officer and was named Executive Vice President. Information at: http://biz.yahoo.com/prnews/040205/deth015 1.html

2-5-04 Solar PV Racking System

Uni-Rac announced that installers of SunFrame can now accommodate all 100-W and larger PV modules manufactured by AstroPower, BP Solar, Evergreen, and Kyocera as well as the ASE 300 from RWE Schott Solar. More at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPT61.htm

UniRac: http://www.unirac.com/

2-5-04 Renewable Energy Finance Forum

The American Council On Renewable Energy and Euromoney Energy Events are organizing the first Renewable Energy Finance Forum – Wall Street. The aim of the event is to show the opportunities that exist in the RE finance market worldwide, and to bridge between the U.S. and European RE finance communities. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=6027

ACORE: http://www.americanrenewables.org/

2-5-04 WorldWater MOU with the Sandi Group

World Water Corporation has signed a memorandum of understanding with The Sandi Group, Inc. to form a Joint Venture to solicit contracts in Iraq in the areas of Public Works and Water and Power Sector Rehabilitation. The two companies will bid on contracts that utilize WorldWater's proprietary solar power and water management services, technology, and products. Story at: http://biz.yahoo.com/bw/040205/55082 1.html

2-5-04 Colorado, Solar Buildings Partnership

Eco-Build has joined with Altair Energy to provide complete grid-tied and battery backup solar PV systems to residential and commercial customers throughout Colorado. More details at SolarAccess: http://www.solaraccess.com/news/story?storyid=6026

Altair: http://www.solaraccess.com/marketplace/compdetail?compid=508

Eco-Build: http://www.eco-build.com/1 Home/index.htm

2-5-04 Australia, Renewable Energy Funds

The 11th funding round of Australia's New South Wales Renewable Investment Program is open for project bids. Funding is available from the NSW Government for renewable energy projects that are nearing commercial realization. Information at SolarAccess: http://www.solaraccess.com/news/story?storyid=6024

2-5-04 SunAmp Power Project in Arizona

Southern States Power Company, Inc. announced that its subsidiary company, SunAmp Power Company, Inc. has completed the Security and Safety Lighting for Arizona's National Guard. The Arizona National Guard's Camp Navajo contracted with SunAmp to provide solar PV security lighting using BP Solar panels. The 22 Cobrahead streetlights for Camp Navajo are powered by dual BP Solar 75-W solar panel modules. Story at: http://biz.yahoo.com/pz/040204/52061.html

2-5-04 Joe Barton Contender for House Energy & Commerce Chair

Texas Congressman Joe Barton is a leading contender to chair the House Energy and Commerce Committee, following the resignation of Rep. Bill Tauzin of Louisiana. Story at: http://tinyurl.com/2b3qa

2-5-04 Link to News from Konarka on PV Efficiency

See Konarka News at: http://www.konarkatech.com/news_press_newlevel-eff.php

2-5-04 More Coverage of Connecticut's Largest Solar Array, with Photo

See SolarAccess at: http://www.solaraccess.com/news/index.jsp

2-5-04 More coverage of EnviroMission Solar Tower

See SolarAccess at: http://www.solaraccess.com/news/story?storyid=6032

EnviroMission: http://www.enviromission.com.au/

2-4-04 Charis Pricing for New Solar Panel

Charis Energy Development, a subsidiary of Aquentium, Inc., said the company will be announcing its pricing for their newly invented solar panel before the end of January. Said Aquentium President Mark Taggatz, "We anticipate offering a price per watt that will be extremely competitive in the marketplace." Story at: http://biz.yahoo.com/prnews/040203/latu115 1.html

2-4-04 Konarka's New Levels of PV Efficiency (Joe Romano)

Konarka Technologies, Inc., announced it has developed prototypes of its PV cells that have achieved more the 7% efficiency. Konarka is focused on the development of what it terms "third generation" cells that are lightweight, flexible and more versatile than previous generations of products. Says Howard Berke, Chairman, "Konarka's chemistry-based cells represent a new breed of coatable, plastic, flexible photovoltaics that can be used in many applications where traditional photovoltaics can't compete." The company will have pilot-scale production later this year and will begin scaling up production capacity in 2005. Konarka:

http://www.konarkatech.com/news_press.php

Press Contact: Joe Romano, Partner, HighGround, Inc. at 781-279-1320 x 208 or jromano@highgroundinc.com

2-4-04 Connecticut, State's Largest Solar Energy Project

Connecticut's largest solar electric system, a 23.1 kW array on the roof of the maintenance garage at CTTRANSIT, was dedicated February 3. The project was made possible with the support of the Connecticut Clean Energy Fund, which covered about 40% of the installation cost. The PV array was manufactured by PowerLight Corporation and installed by Select Energy Services. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR329.htm PowerLight: http://www.powerlight.com/

2-4-04 More on Rhode Island Renewable Energy Fund

See the attached link for RFPs, in particular Solar Photovoltaic Funding: http://www.riseo.state.ri.us/riref.html

2-4-04 California, Renewable Energy Quarterly Report (Nancy Hassman)

The Renewable Energy Program, Quarterly Report to the Legislature is available on line at: http://www.energy.ca.gov/renewables/documents/legislature.html

2-4-04 India, Mithradam Program (George Peter)

The Renewable Energy Centre Mithradam, successfully completed a partnership project in solar PV and fuel cells with the Kerschensteiner School in Germany. Information at: http://www.mithradham.org

2-4-04 U.S. Comprehensive Energy Bill

Energy & Environment Daily (subscription) reports that Senate leaders have developed a plan to use a scaled-back energy bill as an amendment to any of 3 bills expected to go before the Senate this month. Also, an idea has been put forward to pass the existing energy bill with companion legislation that makes changes to it. The House leaders say no compromise on what has been agreed to. Meanwhile, Energy & Environment Daily also reports that Representative Billy Tauzin resigned his position as chairman of the House Energy and Commerce Committee. (Energy & Environment Daily: E-mail: pubs@eenews.net *Phone: 202-628-6500).

2-4-04 Clean Energy States Alliance (Kevin Eber, EERE Network News)

Twelve states in the U.S. have established funds to promote renewable energy and clean energy technologies. The Clean Energy States Alliance is a non-profit project to provide information and technical services to these funds and to work with them to build and expand clean energy markets in the U.S. More information at: http://www.cleanenergyfunds.org/
EERE News: http://www.eere.energy.gov/news/

2-4-04 More on Solar Tower Development, EnviroMission:

http://biz.yahoo.com/prnews/040204/lnw013_1.html

2-3-04 Eikos \$1M Investment to Develop Carbon Nanotube Coating Technologies

Eikos Inc., has received a \$1M investment from Itochu international, Inc., and will further develop high-transparency conductive films for a variety of markets including flat-panel displays, solar energy, and OLED lighting. Story at: http://biz.yahoo.com/bw/040202/25709 1.html. In addition, Eikos is to receive a \$1M government contract for transparent conductive coating research. Story at: http://biz.yahoo.com/bw/040202/25685 1.html
Eikos: http://www.eikos.com/

2-3-04 RWE Schott Solar Contract with Phonix SonnenStrom

RWE Schott Solar signed a dealer contract with Phonix SonnenStrom at the end of last year. RWE says that the move is designed to build the company's market share beyond its current 25%

of the German market. The partnership will market RWE's 200 W module, the ASE-200-GT-

FT/TE. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUCO55.htm

RWE Schott Solar: http://www.rweschottsolar.com/ Phonix SonnenStrom AG: http://www.phoenixsolar.de/

2-3-04 California, Solar-powered Homes

Premier Homes has started construction on a Sacramento-area housing subdivision made up of energy efficient homes. The 95 homes in the Premier Gardens subdivision will have standard features such as solar-power-generating roof tiles and other energy-efficient designs. Story through Solarbuzz at: http://www.bizjournals.com/sacramento/stories/2004/02/02/focus3.html

2-3-04 Kyocera Solar-powered Vaccine Refrigerators

Kyocera Solar has expanded its VaccPak line of solar-powered vaccine refrigeration products to include a larger capacity category. The new VaccPak XL6000 is the 2nd model in the series to be approved by the World Health Organization. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPT60.htm

Kyocera: http://www.kyocerasolar.com/

2-3-04 Florida, Solar Lighting at Bus Shelters

Three-thousand solar-powered bus shelters will be installed throughout Miami-Dade County, Florida, under a concession obtained by the Spanish company, Cemusa. BP Solar will supply the PV panels. See story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR328.htm

Cemusa: http://www.cemusa.com/web_ingles/html/index.htm

BP Solar: http://www.bpsolar.com/

2-3-04 Sustainable Energy Coalition (K. Bossong)

The Sustainable Energy Coalition has vowed to work to reverse the reductions in the White House FY 2005 budget request for renewable energy and energy efficiency programs. Says the Coalition, while the DOE's overall EERE budget is reduced by 2.3%, significant increases in funding for weatherization and hydrogen mask far deeper cuts in a number of core programs. (Source: e-mail newsletter, 2-2-04) Sustainable Energy Coalition:

http://www.sustainableenergy.org/

See also SolarAccess article at: http://www.solaraccess.com/news/story?storyid=6008

2-3-04 Silicon Process for PV Cells

A new electrochemical process for the extraction of silicon has been developed by chemists at Wuhan University in China. More on this development at SolarAccess: http://www.solaraccess.com/news/story?storyid=6000

2-3-04 U.S. Appropriations Hearings

A hearing in the House of Representatives Appropriations Committee on Renewable Energy, Energy & Water Appropriations, is scheduled for March 17 at 10am.

2-3-04 Breakthrough Answer to Global Warming?

Robert R. Holcomb, M.D., Ph.D., an assistant professor at Vanderbuilt University School of Medicine unveiled a new technology called Electron Stream Carbon Dioxide Reduction (ESCO2R), called the Carbon Dioxide Converter, which permanently splits the molecular structure of carbon dioxide into its basic elements. The converter functions in a similar way for other greenhouse gases, such as sulfur dioxide. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=6001

2-3-04 More on AstroPower's Future?

AstroPower Inc. has filed for bankruptcy as part of an offer by GE to buy most of the company's assets for \$15 M. Story at:

http://www.delawareonline.com/newsjournal/local/2004/02/03astropowerfiles.html

More Sources for AstroPower Coverage: http://www.astropower.com/press_releases.htm
http://www.solaraccess.com/news/story?storyid=5999
http://www.solarbuzz.com/News/NewsNACO181.htm

2-3-04 Australia, EnviroMission Moving Forward on Solar Power Station

EnviroMission and Leighton Contractors Pty Ltd said that with the pre-feasibility study completed the solar power station planned for Australia would move towards full commercial development. Said Roger Davey, EnviroMission chief executive, an independent party will now make a detailed examination of the financial structuring of the project. EnviroMission aims to build a 1-km-high solar tower power station 25 km north of Mildura in NSW, surrounded by a "greenhouse skirt" of solar collector panels 7 km wide. The electricity would be generated by 32 wind turbines driven by the mass of moving air under the huge transparent collector and the updraft effect created by the huge tower. Story at: http://www.theage.com.au/articles/2004/02/03/1075776058432.html

2-2-04 AstroPower Asset Sale to GE Energy

AstroPower announced that it has reached an agreement to sell certain of its U.S. business assets to GE Energy. AstroPower has filed a petition for reorganization under Chapter 11 of the Bankruptcy Code. The transaction with GE Energy will be subject to competitive bidding and Bankruptcy Court approval. The acquisition represents a continuation of GE Energy's strategy of developing a renewable energy portfolio. Story at: http://biz.yahoo.com/bw/040201/15069 1.html

2-2-04 President's FY 2005 Budget

See this link, under 'Energy Efficiency and Renewable Energy' for the President's FY 2005 Solar budget (starting on page 87): http://www.cfo.doe.gov/budget/05budget/index.htm

2-2-04 Germany, Solon Plans for 18-MW Capacity (Michael Schmela)

Plans for a PV system with an 18 MW capacity in southern Germany are being developed. The project is led by PV module manufacturer Solon AG under contract to as yet anonymous investors, and construction is expected to start in July. See the story at Photon International: http://www.photon-magazine.com/

2-2-04 Kyocera Solar Opens Office

Kyocera Solar, Inc. announced it has hired Gene Bertsche to manage its new sales office in Middleton Springs, Vermont. He will serve the northeastern U.S. and parts of Canada from the office. Story at Solarbuzz: http://www.solarbuzz.com/news/newsNACO180.htm Kyocera Solar: http://www.kyocerasolar.com/

2-2-04 Advent Solar Relocation, and New Board Member

Advent Solar has relocated to the Albuquerque Technology Incubator where it has established laboratory and office facilities. The Incubator serves as an interim facility while the company evaluates potential sites for its production plant. Also, Robert O. Johnson has been elected to the Board of Directors, bringing over 25 years of PV experience in his previous role as Vice President of Strategies Unlimited. Story at Solarbuzz: http://www.solarbuzz.com/news/newsNACO179.htm

2-2-04 Global Electric Licensing Rights

Whistler Investments, Inc., (name change pending to Global Electric) announced it has an agreement with RV Systems, Inc., for the exclusive worldwide rights to the advanced

Lithium/Solar power system technology developed by Chaz Haba, for application to residential and commercial properties. Says Haba, President of RV Systems, "The purpose of the Lithium Solar House project is to provide a test bed for an alternative source of power to the home, not connected to the power grid. The power source will be solar panels for charging the lithium batteries. Story at: http://biz.yahoo.com/pz/040202/51822.html

2-2-04 Colorado, Renewable Standard Introduced

A bipartisan group of Colorado legislators introduced a bill for a renewable energy standard of 500 MW of renewable energy capacity by 2006, 900 by 2010, and 1,800 by 2020. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5994

2-2-04 California Renewable Portfolio Standard Guidelines

The California Energy Commission's Renewables Committee will conduct a hearing on February 5, 2004, to solicit input on proposed guidelines for implementing California's Renewables Portfolio Standard. The notice of hearing and details about listening in is on-line at http://www.energy.ca.gov/portfolio/

2-2-04 Adam Browning, Vote Solar Initiative

Read about Adam Browning, and the Vote Solar Initiative at: http://www.gristmagazine.com/dearme/browning012604.asp, from net metering to legislation to photovoltaics, "one of the most reliable sources of energy ever invented".

2-2-04 Texaco Ovonic on HaveBlue's Hydrogen Team

HaveBlue LLC announced it has reached an agreement with Texaco Ovonic Hydrogen Systems LLC that calls for the company to provide the developmental metal-hydride hydrogen storage system for HaveBlue's X/V-1 marine hydrogen fuel technology demonstration vessel. HaveBlue's patented propulsion and generation system produces renewable hydrogen from purified seawater using clean power sources such as solar panels, wind generators, and regenerative electric drive motors. Story at: http://www.powerpulse.net/cgi-bin/displaystory new.pl?id=10086
HaveBlue: http://www.haveblue.com/

http://www.haveblue.com/xv1/index.htm

2-2-04 Sri Lanka, National Solar Program

The Solar Industries Association (SIA) is calling for a national policy on solar energy. Said SIA President Pradip Jayawardena, "Sri Lanka is a global leader in providing solar power to the masses on a per capita basis." He described his goal as providing electricity to 100% of the country. The government funded Renewable Energy for Rural Economic Development (RERED) programme will bear the capital cost on behalf of the end user. Story at: http://www.sundavobserver.lk/2004/02/01/bus04.html

JANUARY

1-30-04 U.S. Comprehensive Energy Bill

The comprehensive energy bill is once again under debate, with an array of opinions from renewable energy, energy efficiency, and environmental communities. See story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5996

Senate Democrats are identifying sections of the bill to move as standalone legislation or riders, while Senate Republicans are still working to change the bill just enough to gain enough votes to pass the bill. And, there is some discussion about finding ways to cut the bill's price tag. http://tinyurl.com/yqtqz

1-30-04 U.S., President's Fiscal-Year 2005 Budget

The President's FY 2005 budget will be released on Monday, February 2. We will provide links to the solar budgets as soon as they are available.

1-30-04 New Inverter

The UL listed StarInverter PVP1100 has been introduced by PV Powered. The PVP1100 meets UL 1741, IEEE 1547, IEEE 929, IEEE 519 standards and has a 10-year warranty. Information at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT59.htm

PV Powered: http://www.pvpowered.com/

1-30-04 Western Australia Solar Site

International scientists will visit mid-west Western Australia as part of a bid to be chosen for a new PV solar power system. The Mid-West Development Commission has proposed Perenjori as a site. The International Energy Agency Task Force Eight is studying the PV systems, and will visit Perenjori next week. Story at: http://www.abc.net.au/news/newsitems/s1034675.htm

1-30-04 Canada, University of Waterloo's Solar-powered Pub

A 36-panel array of PV panels has been installed on the roof of Federation Hall, a student-run pub at the University of Waterloo. The array is a result of efforts by the Solar Technology Education Project, a student-led volunteer team with a goal to raise awareness about renewable energies. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5974

1-30-04 Iowa Solar Energy Program

Muscatine Power & Water announced the establishment of "Solar Muscatine", their alternative energy program. Customers can volunteer to pay \$3, \$5, or \$7 extra on their monthly residential utility bill to help pay for purchase and installation of solar arrays in Muscatine. MP&W is building a 2.5 kW solar array at its headquarters to get the program started. Story through Solarbuzz at: http://www.muscatinejournal.com/articles/2004/01/28/news/news3.txt

1-29-04 Link for Workshop on Life Cycle Analysis and Recycling of Solar Modules (Rebekka Mattyasovszky)

The announcement and program for the "Workshop on Life Cycle Analysis and Recycling of Solar Modules - The 'Waste Challenge'", 18 and 19 March 2004 in Brussels, Belgium is available at: http://streference.jrc.cec.eu.int/html/Events.htm

1-29-04 Spire Corporation Maintains Nasdag Market Listing

Spire Corporation announced that as a result of the recent filing of its SEC Form 10-QSB for the 3rd quarter 2003, Nasdaq has notified the company that Spire Corporation will resume trading under the trading symbol SPIR on January 30, 2004. Story at: http://biz.yahoo.com/bw/040129/295231 1.html

1-29-04 WorldWater Corp. Accomplishments

WorldWater Corp. announced the Company's most significant accomplishments and milestones achieved during 2003, including installation of the largest solar irrigation pumping system in the world, installation of the world's largest solar-powered refrigeration compressor system, participation in a successful bid to supply the largest PV installation on a college campus in the U.S., and others. See story at: http://biz.yahoo.com/bw/040129/295277_1.html WorldWater Corporation: http://www.worldwater.com/

Also, WorldWater announced it has already received sales orders for completion in 2004 in excess of \$4M, an increase of over 300% from estimated revenue in 2003. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO177.htm

1-29-04 California, Carmanah Solar Airport Lighting Project

Carmanah Technologies is installing 560 units of its Model 601 solar-powered LED lights at the Truckee Tahoe Airport in California. Carmanah officially launched its aviation products less and a year ago, and has over 5,000 lights installed at airports in 30 countries. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR327.htm
SolarAirportLights: http://www.solarairportlights.com/

1-29-04 California, High Desert Solar Energy - Solar Thermal and Solar Electric

In the High Desert, 3 solar-electric generating systems produce a total of 354 MW. And, a new PV power plant is on the drawing boards. TrueSolar Solutions and Global Solar Energy, subsidiaries of UniSource Energy Corp. in Tucson, Arizona plan to build the world's largest PV generating station at a 40-acre site near Daggett. This story covers solar plants, RPS, solar's future, etc., at: http://www.sbsun.com/Stories/0,1413,208~12588~1918701,00.html

1-29-04 Arizona, Solar Electric Power for New Homes

Edwards Design Group, Inc. and American Solar Electric, Inc. are bringing grid-connected PV power systems to several new homes. Commitments have been made for 5 new projects in Scottsdale, Cave Creek, and North Phoenix. Each PV system will have an array power rating of 5 kWp, and 50% of the installed system cost will be paid for through the recently revised EPS Credit Purchase Program. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR325.htm American Solar Electric: http://www.americanpv.com/

1-29-04 ImaginIt Inc. New Products

ImaginIt Inc. announced 3 new solar electric product lines: eBuildings(TM), Solar Street Furniture(TM), and Sun & Sea PV(TM) (eBuildings[™], Solar Street Furniture[™], and Sun & Sea PV[™] trademarks of the ImaginIt Inc.). The eBuildings(TM) product line includes products such as solar electric roof systems, façade systems, skylight systems, and awning systems. Story at: http://biz.yahoo.com/prnews/040128/law102 1.html

ImaginIt, Inc.: http://www.ImaginIt.cc/

1-29-04 SunPower Recognition

SunPower Corp. announced that analogZONE (an on-line engineering magazine) has selected the A-300 silicon solar cell as a winner of its "Product of the Year" award in the "Green Technology" category. Story at: http://biz.yahoo.com/bw/040128/285627 1.html

SunPower: http://www.sunpowercorp.com/ analogZONE: http://www.analogzone.com/

1-29-04 U.S. Comprehensive Energy Bill

Congressional leaders are looking at ways to possibly break up the draft energy bill into smaller sections that could pass as stand-alone legislation.

1-28-04 Workshop on Life Cycle Analysis and Recycling of Solar Modules (Rebekka Mattyasovszky)

The European Commission, Institute for Environment and Sustainability, Renewable Energies Unit is holding a "Workshop on Life Cycle Analysis and Recycling of Solar Modules, The 'Waste Challenge'", 18 and 19 March 2004 in Brussels, Belgium. The aim of the workshop is to give an overview about the current scientific and political discussion, identify problems, and discuss possible solutions. For the programme and registration form, contact:

Rebekka.Mattyasovszky@cec.eu.int

1-28-04 Solar Power and Government Subsidies, Frost & Sullivan Analysis

Says Frost & Sullivan Industry Analyst, Patricia Seifert, "Government subsidies are expected to facilitate mass production and, thereby, drive prices down sooner. Subsidies will be necessary for another three to five years until solar power can complete with more common energy sources such as natural gas or oil." See SolarAccess:

http://www.solaraccess.com/news/story?storyid=5975

http://www.energy.frost.com/prod/servlet/vp-portal-home.pag?vpid=2843800

1-28-04 European Conference for Renewable Energy Conclusions

To download a copy of the conclusions from this conference - Intelligent Policy Options - 19-21 January 2004 in Berlin, go to: http://www.epia.org/07news/news.asp

1-28-04 Fronius Inverters UL Listing

Fronius USA Solar Electronics Division has received Underwriter Listing for their FRONIUS IG 3000, IG 2000, and IG 2500-LV grid-tied inverters. Fronius has also begun its installer and dealer training at their Santa Barbara, California office. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPT57.htm

Fronius: http://www.fronius.com/

1-28-04 Solar Hydrogen

More on Stuart Licht's team demonstrating a solar-powered way to produce hydrogen from water can be found at CNN Yellowbrix: http://tinyurl.com/2jgba

1-28-04 Coverage of Solar-Powered Mars Rovers

Additional coverage of the Mars III-V solar cells can be found at Compound Semiconductor: http://www.compoundsemiconductor.net/articles/news/8/1/27/1 and. SpaceDaily:

http://www.spacedailv.com/news/solarcell-04a.html

See also EERE Network News "NASA Delivers Solar-Powered Vehicles to Mars" see Archives, January 28 (Kevin Eber) at: http://www.eere.energy.gov/news/

1-28-04 Coverage of the Apollo Project

Additional opinions on the Apollo Project can be found at: http://www.chron.com/cs/CDA/story.hts/editorial/2371889

1-27-04 Rhode Island Solar Incentives RFP

The Rhode Island Renewable Energy Fund is seeking to support installation of PV in excess of 5 kW AC on commercial, industrial, and institutional buildings in Rhode Island. Phase 1 of the RFP

has a deadline for project submissions of 21 April 2004. More on this RFP, and the link to the RFP, at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR323.htm

1-27-04 Burghausen, Germany Solar Grade Silicon

Wacker has developed a process for making solar-grade silicon at its main plant in Burghausen. Says Ewald Schindlbeck, "Of course some competitors may say it's not worth our while but we have given a real commitment that we will invest specifically for PV (photovoltaic cells)". Other companies working in this area are Joint Solar Silicon (a joint venture between Degussa and Deutsche Solar), and Hemlock (a joint venture among Japan's Shin-Etsu and Mitsubishi and Dow Corning). Elkem says it has found a new refining method and plans to make an announcement this month. More on these developments at various sources:

http://www.dailytimes.com.pk/default.asp?page=story 24-1-2004 pg5 15 http://www.forbes.com/business/newswire/2004/01/25/rtr1226018.html http://www.usatoday.com/tech/news/2004-01-26-solar-cells x.htm

1-27-04 Sunways Solar Window Blinds

Sunways has launched a new building use for solar cells - "Solar Blinds". They protect against bad weather, sun, and burglary as well as produce electricity with their integrated solar cells. More at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPT15.htm
Sunways: http://www.sunways.de/en/index.php

1-27-04 Japan's Largest Solar Power Generation Facility

The Tokyo Metropolitan Government announced construction of Japan's first MW class solar power generating facility at the Asaka Water Purification Plant. Story at: http://neasia.nikkeibp.com/wcs/leaf?CID=onair/asabt/news/287412

1-27-04 PV Activities In Japan (Resources Total System, Co., Ltd., Osamu Ikki)

The latest issue of "PV Activities in Japan" covers Japan's FY 2004 PV-related budget in detail, and gives highlights of PV activities from FY 2003. Also included are the latest activities of government, suppliers, and users. For example, Showa Shell Sekiyu is establishing Shell Solar Japan Ltd., under the name of Shell Solar GmbH. This and much more information available by subscription from Resources Total System Co., Ltd. in Chuo-ku, Tokyo, e-mail: PvinJP@rts-pv.com, fax: +81-3-3553-8954, contact ohigashi@rts-pv.com).

1-27-04 California, St. Francis Winery Solar Electric System

St. Francis Winery will install a 457-kW solar electric system for its winery in Santa Rosa. The system, furnished by PowerLight Corporation, will be completed in May 2004. Said Christopher Silva, President and CEO of St. Francis Winery, "We've found that solar electricity is affordable and practical, not only for winemakers, but for all businesses and organizations that want to reduce costs and help stabilize our region's power supply." Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR324.htm

PowerLight: http://www.powerlight.com/

1-27-04 Democrats on Energy Policy

One of the many summaries and briefs on the candidates http://tinyurl.com/2nyvb

1-27-04 Reference for Global Warming Report (Kevin Eber)

For more on the Woods Hole report, see: http://www.whoi.edu/media/saltchange.html

1-26-04 Konstanz, Germany: 2 MW Sunways AG and solarcomplex GmbH Installation Sunways AG and solarcomplex GmbH have an agreement for the installation of 2 MW of PV by

2004. The installation in the district of Konstanz will have components made by Sunways AG and its subsidiary MHH Solartechnik GmbH. exclusively. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsEUPR137.htm

solarcomplex: http://www.solarcomplex.de/
Sunways: http://www.sunways.de/en/index.php

1-26-04 Pforzheim, Germany: Commercial PV System on Line

A 128-kW PV roof top system has been installed by Energo GmbH on a commercial building in Pforzheimer. Energo, which operates 12 large-scale installations, will operate the plant. Story at

Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR138.htm

Energo: http://www.energo-solar.de/

1-26-04 Berlin, Germany: Cooperation on PV

At the European Conference for Renewable Energy, Environment Minister, Jurgen Trittin announced closer cooperation among the Department of the Environment, the PV industry, and the research institutes in Germany. Also at the European Conference were representatives of the Federal Solar Industry Association and the Fraunhofer Institute for Solar Energy Systems. More on the Conference at Solarbuzz: http://www.solarbuzz.com/News/NewsEUGO27.htm

1-26-04 UK, Solar Power Plan

The London Plan outlines planning rules for local authorities that address PV installations. The Mayor of London is a supporter of renewable energy and says, "We need to introduce more photovoltaics and we will issue guidance to developers. It would be ridiculous if the vast majority didn't have solar panels or photovoltaics." Story through Solarbuzz at: http://news.independent.co.uk/uk/environment/story.isp?story=484797

1-26-04 South Asia Regional Initiative for Energy

The Global Village Energy Partnership has posted a Request for Proposal, with a deadline of 20 February 2004. Proposals are sought for projects that fit into one of two categories: Research, and Outreach. See announcement at: http://www.sari-energy.org/small_grants/sari_rfp_oth.html

1-26-04 Power-Gen Conference - Clearing the Air on Energy

Information regarding the Conference, 1-3 March 2004 in Las Vegas, Nevada, can be found at: http://pgre04.events.pennnet.com/

1-26-04 More on the Omnibus FY 04 Appropriations Bill (highlighted in SEIA's weekly newsletter)

The FY 04 Omnibus appropriations bill (which should be signed shortly) includes \$179,175,000 for the National Institute of Standards and Technologies Advanced Technology Program, of which \$60,700,000 is to be expended for awarding new grants before September 30, 2004. A number of solar companies have participated in this Department of Commerce program, and the agency has a strong interest in doing more work in solar and energy. Call SEIA for more details.

Advanced Technology Program: http://www.atp.nist.gov/

Examples:

Global Solar Energy: http://jazz.nist.gov/atpcf/prjbriefs/prjbriefs/prjbrief.cfm?ProjectNumber=98-03-0029 International Solar Electric Technology, Inc.:

http://jazz.nist.gov/atpcf/pribriefs/pribrief.cfm?ProjectNumber=98-03-0022

MicroCoating Technologies Inc.:

http://jazz.nist.gov/atpcf/prjbriefs/prjbrief.cfm?ProjectNumber=98-03-0054

AstroPower: http://jazz.nist.gov/atpcf/prjbriefs/prjbrief.cfm?ProjectNumber=00-00-5707

General Electric Company, Global Research:

http://jazz.nist.gov/atpcf/prjbriefs/prjbrief.cfm?ProjectNumber=00-00-5925

<u>5016</u>

SunPower Corporation: http://jazz.nist.gov/atpcf/prjbriefs/prjbriefs/prjbrief.cfm?ProjectNumber=99-01-4040 Energy Photovoltaics: http://jazz.nist.gov/atpcf/prjbriefs/prjbri

The bill also includes \$650,000,000 for the Millennium Challenge Corporation, a new aid corporation focusing on poor, stable countries. SEIA is working with some graduate students from GWU on an effort to determine how this money can be used to fund leveraged rural electrification projects.

1-26-04 Global "Warming" in Britain

In the continuing debate on global warming, new research suggests a change "of remarkable amplitude" in the circulation of the waters of the North Atlantic. The development described as "the largest and most dramatic oceanic change ever measured in the era of modern instruments", by the Woods Hole Oceanographic Institute (which led the research) would affect the Gulf Stream, which keeps Europe's weather mild. Story at:

http://news.independent.co.uk/uk/environment/story.jsp?story=484490

1-26-04 Basic Research Needs to Assure a Secure Energy Future

This report, published a year ago from the Basic Energy Sciences Advisory Committee states, "Current projections estimate that the energy needs of the world will more than double by the year 2050. This is coupled with increasing demands for 'clean' energy - sources of energy that do not add to the already high levels of carbon dioxide and other pollutants in the environments. These coupled challenges simply cannot be met by existing technologies. Major scientific breakthroughs will be required to provide reliable, economic solutions." The report describes results of the workshop, a compilation of 37 proposed research directions.

See Basic Research Needs to Assure a Secure Energy Future at:

http://www.sc.doe.gov/bes/besac/reports.html

The Website for the U.S. Climate Vision is: http://www.climatevision.gov/index.html

1-26-04 Sustainable Energy Coalition (Link)

For the text of the letter from 18 business, consumer, environmental, and energy policy organizations calling on Congress to "enact the broadly-supported energy efficiency and renewable energy provisions in the proposed, but presently stalled, national energy bill", see: http://www.commondreams.org/news2004/0122-08.htm

1-23-04 Hawaii, Utility HECO RFP

Renewable Hawaii Inc. has issued a Renewable Energy Request for Project Proposals for the island of Hawaii. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR322.htm Renewable Hawaii: http://www.renewablehawaii.com/RenewableHawaii/home/

1-23-04 Whole Foods Market Solar Power

Whole Foods Market, Inc., in Edgewater, New Jersey, is installing solar panels made by BP Solar on the store's' roof. Says David Lannon, Whole Foods Market northeast region president, "We plan to continue to investigate opportunities to install solar power in other northeast region

stores". Whole Foods Market, BP Solar, and SunEdison worked together to create the 120 kW solar electric system. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR321.htm

BP Solar: http://www.bpsolar.com/ SunEdison: http://www.sunedison.com/

1-23-04 More on the Mars Spirit Rover and Spectrolab Solar Cells

Additional coverage of the Mars rover, and Spectrolab's PV cells can be found at SolarAccess: http://www.solaraccess.com/news/story?storyid=5939. Said Richard Esposito, Media Relations for Spectrolab's efforts in space-based solar have helped the company achieve record-breaking performance for terrestrial concentrator solar cells.

Spectrolab: http://www.spectrolab.com/

1-23-04 Southern States Power and SunAmp Power Company Agreement

Southern States Power Company, Inc. announced that the company has finalized an agreement to acquire 51% of the outstanding and issued stock of SunAmp Power Company, a regional solar energy provider. Says Harrison McCoy, III, President and Chairman of Southern States Power Company, "...SunAmp's status as a distributor for BP Solar, one of the world's largest solar equipment suppliers, as well as its established client base in Arizona, including existing completed solar power projects, should allow Southern States to expand its reach to additional renewable energy clients". Story at: http://biz.yahoo.com/pz/040122/51327.html

SunAmp: http://www.sunamp.com/

Southern States Power: http://www.sspowerco.net/

1-23-04 California, Guidelines for Utility Power Planning

California energy regulators adopted guidelines for the state's utilities to draft long-term plans to ensure they have enough power to deliver to customers at low and stable prices. Public Utilities Commission President Michael Peevey said the companies must build up supplies of renewable energy like solar power and coordinate power planning with the California Energy Commission. Utilities will develop models that could lead to local communities building their own power resources from renewable energy and more efficient use of energy. Story at: http://biz.yahoo.com/rc/040122/utilities california cpuc 1.html

1-23-04 North American Energy Summit

The flyer for the North American Energy Summit, 14-16 April 2004, Albuquerque, New Mexico, which includes breakout sessions on developing renewable energy and energy efficiency, can be accessed at: http://www.westgov.org/wga/initiatives/energy/summit/index.htm

1-23-04 Support for Energy Bill Provisions (Ken Bossong)

Eighteen business, consumer, environmental, and energy policy organizations called upon Congress to "enact the broadly-supported energy efficiency and renewable energy provisions in the proposed, but presently stalled, national energy bill."

1-23-04 Powering Connecticut with Solar Energy

A seminar for businesses on the advantages of solar energy will be held in Hartford, Connecticut on 3 February 2004, with presentations by PowerLight, Connecticut Clean Energy Fund, and others. For more information, contact Heidi Bieber at Heidi.Bieber@ctinnovations.com.

1-23-04 Omnibus Bill Passed in Senate

The Senate voted 65 to 28 to send the FY 2004 Omnibus bill (HR 2673) to the President for his signature. The bill covers seven of 13 appropriations bills. Included in the Conference Report are provisions such as a \$50-million rainforest project in Corralville, lowa, that would utilize renewable

energy, and \$23 million for Agriculture's rural development, renewable energy program loans and grants.

1-22-04 Evergreen's Latest String Ribbon Technology Advance

Evergreen Solar announced it has successfully completed a prototype research project for its proprietary String Ribbon (tm) technology for manufacturing solar cells, which enables the growth of 4 silicon ribbons from a single furnace. The project was co-funded by a 3-year, \$2 M grant from the Advanced Technology Program of the National Institute of Standards and Technology. More on this advance at: http://tinyurl.com/23f22

Evergreen News: http://tinyurl.com/yxpf

1-22-04 Malaysia Building Integrated PV Project

The 5-year Malaysia Building Integrated Photovoltaic project will look into ways to raise awareness of solar energy and boost local manufacturing of PV equipment to bring down costs for consumers, with the vision of widespread use of PV technology. Story through Solarbuzz at: http://tinyurl.com/yvtde

1-22-04 European Renewables Progress

Projections from the European Renewable Energy Council show that use of renewable technologies could expand to satisfy 20% of Europe's energy demand by 2020. For electricity generation, the proportion contributed by wind, hydro, PV, biomass and geothermal in 2020 will reach almost 34% according to the projections. More on the 3-day European Conference for Renewable Energy - Intelligent Policy Options can be found at SolarAccess:

http://www.solaraccess.com/news/story?storyid=5928

EREC: http://www.erec-renewables.org/default.htm

1-22-04 BP Solar Celebrity PV Program

Edward Norton is expected to talk about the BP Solar Neighbors(TM) (Neighbors[™] is a trademark of the BP Solar Company) Program on the Larry King Live TV program on CNN this Saturday. Every time a celebrity joins the BP Solar Neighbors(TM) Program, BP donates a solar system to a low-income family in California. Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNACO175.htm

BP: http://www.bpsolar.com/news.htm

1-22-04 More on Shell's 5 MW Solar Plant

Additional coverage of the Royal Dutch/Shell Group plans to build the world's largest solar energy plant in Germany can be found at: http://www.msnbc.msn.com/Default.aspx?id=4006977&p1=0

1-22-04 Citigroup's Environmental Policy

Citigroup announced it's adopting a corporate policy to evaluate requests for project financing that could adversely affect the environment, and ban any funding for illegal logging operations. It also commits Citigroup "to invest in sustainable forestry and renewable energy". The policy will include consumer financing for solar panels, residential wind turbines, fuel cells, and other forms of clean energy. Story at: http://biz.yahoo.com/ap/040122/citi environment 18.html
Citigroup Press: http://www.citigroup.com/citigroup/environment/040122a.htm

1-22-04 U.S. Fiscal Year 2005 Budgets

The President's FY 2005 budget should be released on February 2, 2004.

1-21-04 More on Connecticut Clean Energy Fund RFP

The Connecticut Clean Energy Fund released its second annual RFP for solar PV projects. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5916 CT Clean Energy: http://www.ctcleanenergy.com/

1-21-04 The "Power Tile"

A modular, integrated, solid-state system designed to harvest and store solar energy is under development. The device called the "power tile" consists of a PV cell, battery, thermoelectric device, and charge-control circuit. A prototype, which uses a dual-junction PV cell in the power tile, has been fabricated at the Jet Propulsion Laboratory. Story at CNN Yellowbirx: http://tinyurl.com/28gwk

1-21-04 Beacon Power Inverter

Beacon Power Corporation announced that the Smart Power M5 system has been added to approved listings in California and New York, following UL certification less than a month ago. More information at: http://biz.yahoo.com/bw/040121/215466 1.html

Beacon Power: http://www.beaconpower.com/

1-21-04 Universal Communication Systems PV AirWater Machine

Universal Communication Systems Inc. subsidiary Air Water Corporation announced development of the PV-powered AirWater machine. The new machine called "The LIFESAVER" enables production of water in areas without electricity or other energy sources. More information at: http://biz.yahoo.com/bw/040120/205761 1.html

Universal Communication Systems: http://www.ucsy.com/

1-21-04 Heliotronics SunViewer Software (Matthew Arner)

Heliotronics announced SunViewer(TM) (SunViewerTM is a trademark of the Heliotronics, Inc.) 5.0, a new release of their educational software, which visually displays the dynamic behavior of a PV system. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5908

1-21-04 New Mexico, Governor Richardson's State of the State Address (excerpt)

Energy... I want more tools to help expand our renewable energy capabilities for the long haul and help the existing efforts move forward. Thanks to the leadership of our state's two largest utilities, wind power is being supplied to our homes and businesses right now. Solar power, however, is another story. New Mexico ranks 2nd in the nation in solar energy potential, but to date, has done little to capitalize on this abundant natural resource. Therefore, I am forming a Solar Power Task Force to identify a commercial-scale solar power project by the end of the year that would be under construction by 2006. It is a challenge that will take a commitment from both the public and private sector to succeed. The rewards can be substantial, in high-wage jobs and economic development. I am also proposing a \$6 million capital projects package dedicated to incorporating energy efficiency and renewable energy technologies at state facilities and public schools throughout New Mexico. This will save taxpayers and school districts money by reducing energy costs. Government should also lead by example....

Richardson's speech: http://www.governor.state.nm.us/speeches.html Solarbuzz story at: http://www.solarbuzz.com/News/NewsNAGO156.htm

1-20-04 Germany, Shell Solar and GEOSOL 5 MW Solar Power Station

Shell Solar GmbH and Gesellschaft fur Solarenergie (GEOSOL) announced they will build the largest solar power station in the world south of Leipzig in Germany. The free-standing array will comprise 33,500 solar modules with a total output of 5 MW. Shell Solar will be using PV modules of the new Shell SQ series. Press at: http://tinyurl.com/2auug

1-20-04 Solaicx Funding Round

Solaicx announced it has oversubscribed its \$1 million start-up financing round from private investors and will deliver on its promise: to offer solar electricity as a cost-competitive alternative to traditional electricity. Said Robert Ford, CEO, "Our ability to acquire funding under current market conditions is an indication of the strength of the Solaicx team, its technology and its vision." Story at: http://biz.yahoo.com/prnews/040120/sftu021 1.html

Solaicx: http://www.solaicx.com/

1-20-04 BP Sustainable Development Award

The BP Foundation awarded a 3-year, \$1.95 million gift to Stanford University for a research program to support the Program on Energy and Sustainable Development at the Stanford Institute for International Studies. Information at:

http://www.bp.com/genericarticle.do?categoryId=120&contentId=2016092

1-20-04 U.S. Congress

The Senate is scheduled to reconvene today at noon, and resume consideration of the conference report to accompany the Omnibus Appropriations bill for FY 2004 (appropriations bills not yet passed for FY04). We can also expect to start hearing more on the comprehensive, national energy bill. The House also reconvenes today.

1-19-04 EuroPV Conference, "Photovoltaic Devices: Manufacturing Issues" (Arnulf Jaeger-Waldau)

Attached is an announcement of the EuroPV conference, "Photovoltaic Devices: Manufacturing Issues - From Laboratory to Mass Production", to be held in Kranjska Gora, Slovenia, 15-20 October 2004. (PDF 179 KB) Download Acrobat Reader

For additional information, see: http://www.pv-net.net/europv2004.htm

1-19-04 Xantrex and Atlantis Energy Roof Tile PV System

Xantrex Technology and Atlantis Energy Systems are offering an inverter and solar panel combination designed to make it easier for builders to install renewable energy systems. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT55.htm

Xantrex: http://www.xantrex.com/

Atlantis Energy Systems (Sunslates): http://www.atlantisenergy.org/

1-19-04 SPS Energy Solutions Off Grid Solar

SPS Energy Solutions recently took ownership of the Modular Autonomous Photovoltaic Power Supply business from RWE Schott Solar. More information at SolarAccess:

http://www.solaraccess.com/news/story?storvid=5901

SPS Energy Solutions: http://www.solaraccess.com/marketplace/compdetail?compid=660 RWE Schott Solar: http://www.solaraccess.com/marketplace/compdetail?compid=1418

1-19-04 Konarka Technologies Board of Advisors (Joe Romano)

Konarka Technologies announced appointment of 2 new members of its Board of Advisors. Dr. Donald Fitzmaurice and Justin Adams have been named to the Board to guide Konarka's scientific and business development, respectively. See press at: http://www.konarkatech.com/news press.php

1-19-04 Taiwan, Solar-powered Flying Saucer?

The flying machine, with a diameter of 20 cm, is powered by solar energy and can fly as high as 3 stories. It uses the same type of solar cells as NASA used for Mars. Story at: http://tinyurl.com/28qf5

1-16-04 Spectrolab Solar Cells Power Mars Exploration Vehicles

Solar cells manufactured by Spectrolab, Inc., are providing power to "Spirit", the NASA-built spacecraft that landed on Mars January 4. Spectrolab, a Boeing subsidiary, supplied the Improved Triple Junction (ITJ) solar cells for the Spirit rover, and the solar cells will also power NASA's "Opportunity" rover scheduled to land on Mars on January 24. Story at:

http://biz.yahoo.com/prnews/040115/cgth056 1.html

Spectrolab: http://www.spectrolab.com/

1-16-04 More on The Netherlands Solar Energy Project "Sunport" (Johan Trip)

For additional information on the "Sunport" 0.5 MW project, see text and photos at: http://www.pyportal.com/news/data/2004/16010401.htm

Historical information about Sunport and Ekomation can be viewed at: http://www.oja-services.nl/iea-pvps/nsr02/nld4.htm

1-16-04 Kyocera President for U.S.-Based Solar Energy Unit

Kyocera International, Inc., announced it has named Steven C. Hill as president of Kyocera Solar, Inc., a wholly-owned subsidiary with headquarters in Scottsdale, Arizona. Story at:

http://biz.yahoo.com/bw/040116/155880 1.html

Kyocera Solar: http://www.kyocerasolar.com/

1-16-04 TRC to Optimize Energy Use at the Pentagon

TRC announced that its Energy Services Group has been retained by the Department of Defense to work with Dominion Virginia Power to design and build an "intelligent building" system that conserves and optimizes energy use inside the Pentagon. TRC's two initial activities, part of the renovation after September 11, included design, engineering and construction services to develop the Pentagon's Solar Energy Farm, comprising 2 systems - a PV system and a solar hot water system. Information at: http://biz.yahoo.com/bw/040115/155556 1.html
TRC: http://www.TRCsolutions.com/corporate/

1-15-04 Sustainable Energy Technologies Financing

Sustainable Energy Technologies, Ltd announced it is raising \$1,000,000 in a non-brokered issue to fund the commercial production of its 5 kW grid-interactive solar inverter. Information at: http://tinyurl.com/2dnek

Sustainable Energy Technologies: http://www.SustainableEnergy.com/SET-home/index.html

1-15-04 Evergreen Solar Ships 50,000th String Ribbon Solar Panel

Evergreen Solar, Inc., announced the company has shipped its 50,000th solar panel incorporating its proprietary String Ribbon (tm) technology. Said Richard Feldt, President and CEO, "This shipment marks another milestone in Evergreen Solar's continued growth and innovation.... Our current expansion plans will enable Evergreen to quadruple manufacturing capacity over the next 12 to 18 months." Story at:

http://biz.yahoo.com/prnews/040115/nyth038 1.html

Evergreen Press: http://www.corporate-ir.net/ireye/ir site.zhtml?ticker=eslr&script=400

1-15-04 Siemens Research

SolarAccess coverage of Siemens research on organic solar energy can be found at:

http://www.solaraccess.com/news/story?storyid=5883

Siemens: http://www.siemens.com/index.jsp

1-15-04 The Netherlands: Shell Solar and Siemens Nederland Installation

More than 3,000 Shell Solar panels have been installed on the roof of Rotterdam's Oceanium, with a total power output of 0.5 MWp. Siemens Nederland supplied the turnkey system and will maintain it. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR135.htm Shell Solar press: http://www.shell.com/home/Framework?siteld=shellsolar

1-15-04 Apollo Alliance Report

The Apollo Alliance has laid out a vision for a "New Apollo Project" to create 3.3 million new jobs and achieve energy independence in 10 years. Press at:

http://www.apolloalliance.org/for the press/index.cfm

http://www.solaraccess.com/news/story?storvid=5890

New Energy for America: Apollo Jobs Report: http://www.apolloalliance.org/jobs/index.cfm

1-14-04 Thomas J. Starrs Appointment

The Bonneville Environmental Foundation announced that Thomas J. Starrs is joining BEF as Vice President of Marketing and Sales. BEF was established in 1998 to further the development and use of new renewable energy resources. Starrs comes to BEF from RWE Schott Solar Inc. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNACO169.htm

Bonneville Environmental Foundation: http://www.b-e-f.org/

1-14-04 More on Neustadt, Germany, 2 MW Installation

More information on the 2 MW installation in Neustadt, Germany, with about 7,000 ASE-300-DG-FT modules made by RWE SCHOTT Solar can be found at the SCHOTT press release at: http://www.schott.com/english/news/press.html?NID=1519

1-14-04 More on Sanyo's 200-kW Solar Array

Coverage of Sanyo's 200-kW array, with photo, can be found at SolarAccess:

http://www.solaraccess.com/news/index.jsp;

http://www.solaraccess.com/news/story?storyid=5878

1-14-04 Philippines, \$3.5 M from U.S. for Sustainable Energy Development Projects

The U.S. government will provide about \$3.5 M for the Philippines to fund sustainable energy development projects in the country. The memorandum of understanding covers technical assistance in the areas of increased energy efficiency, rural electrification, and expanded use of clean and indigenous sources of energy. Story at: http://tinyurl.com/2grwr

1-14-04 Malawi, Africa: "Is Solar Energy the Answer?"

An article by MISNA describes a broad range of solar activities in the African country of Malawi. http://www.misna.org/news.asp?lng=1&id=104492
http://www.misna.org/news.asp?lng=1&id=104493

1-13-04 SatCon Power Conversion System Approval

SatCon Technology Corporation announced that its PowerGate AE-PV 100 kW PV Power Conversion System has been UL-1741 certified and has received approval by the California Energy Commission for use on California-sponsored projects. A 50 kW PCS is scheduled for testing this month. The designs are also being submitted to the New York Energy Research and

Development Authority to qualify for that state's energy programs. Last year, SatCon entered into an agreement with United Solar Ovonics to develop PV PCSs. The 50 kW and 100 kW designs were part of this initial agreement. Story at: http://biz.yahoo.com/bw/040113/135453_1.html SatCon: http://www.satcon.com/

1-13-04 San Diego, California: SANYO 200 kW Installation

SANYO North America announced it has commissioned 2 new solar installations. The 2 solar arrays are a 150 kW PowerLight PowerGuard(R) (PowerGuard® is a registered trademark of the PowerLight Corporation) system on the roof of SANYO's U.S. headquarters, and a 50 kW PowerLight PowerTracker(R) (PowerTracker® is a registered trademark of the PowerLight Corporation) on an adjacent carport structure. The solar electric systems were furnished by PowerLight Corporation using SANYO's frameless HIT-190 modules, and will be completed in Spring 2004. Story at: http://biz.yahoo.com/bw/040113/135385 1.html

SANYO: http://www.sanyo.com/home.cfm
PowerLight: http://www.sanyo.com/home.cfm

1-13-04 Muscat, Oman: Solar-powered Mobile Phone Network

Solar Sales supplied 8 solar power systems with its partner Specialized Services & Supplies to a local carrier to increase mobile phone coverage. The systems used AstroPower 120 Watt modules, and a total of 160 modules were installed. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPR111.htm

1-13-04 Australia, PV Rebate Program

Tasmanians have received nearly A\$900,000 under the Commonwealth Government's Photovoltaic Rebate Program administered by Aurora Energy. A total of 20 grid-interactive PV systems have been installed. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsASPR110.htm

1-12-04 Munich, Germany: Siemens Organic Solar Cell Efficiency Gains

Siemens researchers announced they have increased the efficiency of printed organic solar cells from 3 to over 5%, and believe that the current state of the art will allow an efficiency of about 7%. Says Christoph Brabec, leader of this development, "Our efforts are partly concentrated on replacing non-organic technology. We are mainly aiming at new markets that we can open up because of the great benefits of our solar cells." More details on this development at Solarbuzz: http://www.solarbuzz.com/News/NewsEUTE11.htm
Siemens AG (German): http://www.siemens.de/index.jsp

1-12-04 European Commission's Overview of EU-funded PV Research

The European Commission's Research DG has published an overview of EU funded research on PV energy. For more on this report, see CORDIS News at: http://tinyurl.com/32s7x
The report (4.4 MB pdf) is available at: http://tinyurl.com/27btn

1-12-04 Hamburg, Germany: Voltwerk 1.4MW PV Facility

The new 1.4 MW PV installation adjacent to the airport runway went on line at the Saarbrucken Airport. The project was developed by Voltwerk AG in collaboration with City Solar AG and installed by Suntechnics, utilizing 9,264 Conergy PV modules. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsEUPR134.htm

Voltwerk AG: http://www.voltwerk.de/en/index.php?&ID=0&language=en

1-12-04 California, School District PV System Rebate from PG&E

RWE SCHOTT Solar, Inc., announced that its customer, the Empire Union School District, is the first district in the state to receive a Pacific Gas and Electric Company rebate for a PV power generation system. Story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPR319.htm RWE SCHOTT: http://www.rweschottsolar.com/

PG&E: http://www.pge.com/biz/rebates/

1-9-04 India, Solar Modules to Rural Areas

BP Solar USA is donating over \$1M worth of solar modules to the Basel Agency for Sustainable Energy, a United Nations Environment Programme Collaborating Centre, which is dispatching them to rural and semi-rural areas of India where over 60% of the population is without electricity. The solar systems will be used for water pumping, lighting and for powering telecommunications services including cyber cafes. Story at: http://tinyurl.com/20vfw

1-9-04 India, BP Solar Distributor, Global Resource Options

Global Resource Options, LLP, of White River Junction, Vermont, announced it has been appointed a BP Solar Distributorship. BP Solar has selected GRO to become their first "Integrated Distributor". Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=5850

1-9-04 See Solar Today January/February 2004 for Bill Yerkes' article on "40 Years of Solar Power"; abstract at: http://www.solartoday.org/2004/jan_feb04/40 yrs solar.htm

Also, see the feature article **"Good as Gold: The Silicon Solar Cell Turns 50" by John Perlin, Lawrence Kazmerski, and Susan Moon** at:

http://www.solartoday.org/2004/jan_feb04/good_as_gold.htm

1-9-04 Nevada, More on Your Vitamins Installation and New Law

For photos, and more information on Your Vitamin's installation and the enacted Assembly Bill, see story through Solarbuzz http://www.solarbuzz.com/News/Newspage.asp at: http://tinyurl.com/3e5uk

1-9-04 New Jersey, Solar on School Roofs

A Board of Education application to the Clean Energy Program was approved for securing some 10,000 solar panels for school roofs that are expected to generate 1.8 MW. Says Cassandra Kling, renewable energy program manager at the Board of Public Utilities, "Collectively, Bayonne is the solar capital of the East Coast". Story through Solarbuzz at: http://www.solarbuzz.com/News/Newspage.asp

1-9-04 Wesley Clark on Renewables

At a Town Hall meeting, Presidential Candidate General Wesley Clark discussed issues concerning renewable energy as a means of protecting the environment, fighting global warming, and achieving energy independence. Clark told a SolarAccess.com reporter that he would fully support a national Renewable Energy Portfolio Standard to provide 10% of the country's electricity needs from renewable energy by 2013, growing to 20% by 2020. Story at SolarAccess: http://www.solaraccess.com/news/story?storyid=5846

1-9-04 AstroPower Report

AstroPower, Inc. announced the filing of a current report on Form 8-K, with the Securities and Exchange Commission, and the resignation of KPMG LLP as AstroPower's auditors. information at: http://biz.yahoo.com/bw/040108/85720 1.html

AstroPower: http://www.astropower.com/

Additional information on AstroPower's recent events is at:

http://tinyurl.com/35c3p http://tinyurl.com/2pjs6

1-9-04 Hawaii, Solar Grant

The Pacific International Center for High Technology Research has received a \$288,800 grant from the government of Japan to help provide solar energy in rural villages of Fiji. Announcement at: http://the.honoluluadvertiser.com/article/2004/Jan/09/bz/bz05a.html

1-9-04 California, Sun Splash

Twenty-three high schools will participate in the 2004 Sun Splash, a solar boat race at Lake Skinner in Hemet 21-23 May. The water district provides the students and their advisors with the boat kits and plans and specifications to construct solar-powered boats, which are about 15 feet and carry one student. More at:

http://www.dailybulletin.com/Stories/0,1413,203~21481~1879446,00.html

1-9-04 Continuing with Air and Space Vehicles....

See earlier information on thin-film technology applications from Iowa Thin Film Technologies at: http://biz.yahoo.com/prnews/031111/cgtu013_1.html
Iowa Thin Film Technologies: http://www.iowathinfilm.com/

1-9-04 NCPV Hotline "Where Did I See That?"

For an index to NCPV Hotline entries in October, November, and December 2003, go to: http://www.nrel.gov/ncpv/

1-8-04 AstroPower Workforce Reductions

AstroPower, Inc. announced it has reduced its workforce by about 10% through a layoff of 45 employees, a direct result of the company's continued efforts to control costs and improve manufacturing efficiency. Interim Chief Executive Officer Carl Young and Interim Chief Financial Officer Eric Glassman have been assessing the company's operating expenses, revenues, and strategic direction since their organization, Bridge Associates, LLC, was brought in to stabilize the company's financial position and manage operations. Said Young, "Production capacity has not and will not be impacted by these job cuts. AstroPower continues to produce solar electric power products as it navigates through its restructuring. The company remains committed to serving its customers despite these challenges." Story at: http://biz.yahoo.com/bw/040107/75715 1.html AstroPower News Release: http://www.astropower.com/press_releases.htm

1-8-04 An article in Solar Today, January/February 2004

features AstroPower; abstract at: http://www.solartoday.org/2004/jan_feb04/astropower.htm

1-8-04 XsunX Commercialization Drive

XsunX announced is has launched its commercial development efforts. Says Tom Djokovich, CEO, "Specifically, we are working with our patented technologies to deliver a licensable process for the manufacture of solar electric glazings for use in the glass, optical film and plastics industries. These industries typically depend on innovation to expand markets and the advantages that XsunX transparent solar cell technology may soon deliver are not only quite clear but also much anticipated." XsunX anticipates offering beta product testing and development relationships to various manufacturers later this year. Story at:

http://biz.vahoo.com/pz/040108/50580.html

XsunX: http://www.XsunX.com/

1-8-04 Grants for Renewables

According to this article, the National Energy Technology Laboratory anticipates it will receive \$14 million from FY 2004 appropriations under the "State Energy Program Special Projects Opportunity for Funding". The Solar Technology Program to deploy PV panels onto brownfield sites will receive \$250,000. Awards will be made through a competitive process, and details are to be released by today. Story at ReFocus: http://www.re-focus.net/ NETL (see Solicitations): http://www.netl.doe.gov/

1-8-04 EHN UK Headquarters

EHN has announced plans to invest £350m in a UK renewable energy programme from its new headquarters in South Wales. The group plans to locate its UK headquarters in Newport, from where it will direct its programme to install over 500 MW of renewable energy generation over the next 5 years. Story at: http://tinyurl.com/2ovbc

1-8-04 Dominican Republic, TECSOL Contract to Provide Solar Electrification

A contract signed by the Secretary of Industry and Commerce and the vice-president of TECSOL allows for 2,000 rural houses in 14 provinces to benefit from a RD\$46 million (\$1.3 million) project for installation of solar panels. Story at Solarbuzz: http://www.solarbuzz.com/News/News/NewsSAPR25.htm

1-8-04 Spire Corporation's New Auditors

Spire Corporation announced it has appointed Vitale, Caturano & Company as its new independent auditor. Information at: http://biz.yahoo.com/bw/040107/75826 1.html

1-8-04 Sustainable Energy Coalition Survey of Presidential Candidates' Views on Energy and Environmental Issues (Ken Bossong)

The <u>Sustainable Energy Coalition</u> released the results of a 30-question survey of the views of 8 of the major presidential candidates on energy and related environmental policy issues. The full text of the candidates' responses and an executive summary can be found at several sites, including the American Solar Energy Society: http://www.ases.org/election2004/sec_candidates.htm

1-8-04 The State of the PV Market

Solar Today January/February 2004 features an article by Paul Maycock on "The State of the PV Market". Abstract at: http://www.solartoday.org/2004/jan_feb04/state_pv.htm

1-8-04 The Making of Solar Champions

An article in EV World covers an interview with Professor Douglas Carroll, University of Missouri Rolla solar car team mentor and author. Overview and photo at: http://www.evworld.com/view.cfm?section=article&storyid=618; full article by subscription.

1-8-04 Solar-powered Billboards

Solar-powered billboards in Iowa electronically update the jackpot numbers by satellite from a central location. Said Sally Robson, advertising manager for the lottery, "This will end up being a cost savings and be more reliable." Story through Solarbuzz at: http://desmoinesregister.com/business/stories/c4780940/23160762.html

1-8-04 Calendar from EERE (Kevin Eber, EERE Network News:)

DOE's Office of Energy Efficiency and Renewable Energy (EERE) offers a 2004 calendar full of energy-saving suggestions. To download a copy of the calendar, see the EERE Web site at: http://www.eere.energy.gov/features/calendar.html.

1-8-04 NCPV Hotline "Where Did I See That?"

For an index to NCPV Hotline entries in October, November, and December 2003, go to: http://www.nrel.gov/ncpv/

1-7-04 A Better Link for Unmanned Aerial Vehicles (UAVs) - Thin Films (Ken Zweibel) From the Daily Press: "Farther into the future is an unmanned airship. Not an airplane, SPS can maintain a relatively geostationary position at 70,000 feet. Call it Superblimp. According to its manufacturer, Lockheed Martin, 'Lift is provided by helium that is contained in its envelope. Differential thrust, electric-powered props control the pitch and roll and keep it in position. With the advent of thin-film photovoltaic solar cells (capable of producing voltage when exposed to radiant light), commercially available fuel cells and lightweight/high-strength fabrics, a high-altitude airship could stay on station weeks or even months at a time by generating its own power and keeping helium loss to a minimal amount." Source: January 5th article, see Lights in Night Sky) http://www.vvdailypress.com/arc0-2004.html

1-7-04 Solar Power Jackets

ICP Solar Technologies will unveil solar power jacket prototypes designed to allow wearers to carry, connect and charge their portable digital devices, at the 2004 International CES January 8-11 in Las Vegas, Nevada. ICP Global Solar division is integrating ICP's flexible thin-film PV technologies (CIGS) in three models of SCOTTeVEST(R) (SCOTTeVEST® is a registered trademark of the ICP Solar Technologies Inc.) jackets. More on this story at Solarbuzz: http://www.solarbuzz.com/News/NewsNAPT54.htm

ICP Solar Technologies: http://www.icpsolar.com/

SCOTTeVEST: http://www.scottevest.com/

1-7-04 China's Expansion of Solar Power

To promote development of PV technology and industry, the State Development and Reform Commission and the Ministry of Science and Technology have developed a solar energy plan for the next 5 years, with an investment of 10bn yuan (\$1.2bn). Also, the World Bank initiated an environment fund project in 2001 and is ready to offer China \$25m to install 10 MW of PV in rural areas. Story at: http://tinyurl.com/yqhdn

1-7-04 California, Governor Schwarzenegger's State of the State Address

See Governor Schwarzenegger's address in which he says: I am going to encourage the building of a hydrogen highway to take us to the environmental future. I am going to encourage builders to build homes using partial solar power. I am going to create a Green Bank to make loans to retrofit old, energy-inefficient buildings. I intend to show the world that economic growth and the environment can coexist. And if you want to see it, then come to California. http://tinyurl.com/2fhb3

1-7-04 Oregon, A&K Development Co. PV Installation

A&K Development Co., -- a Eugene-based food processing equipment maker - is installing 150 PV panels to generate 22.5 kWp. The project is taking aadvantage of a Eugene Water & Electric Board pilot program that provides incentives to businesses to invest in PV systems. Owner Ron Anderson says, "We're always trying to be more competitive and look at areas where we know costs are going to continue to rise. Renewable energy makes a lot of sense". Story through SolarBuzz: http://www.solarbuzz.com/News/Newspage.asp

at: http://www.registerguard.com/news/2004/01/06/b1.bz.develop.0106.html

1-7-04 Additional coverage of the Mars Spirit Rover and its solar power can be found at SolarAccess; http://www.solaraccess.com/news/story?storyid=5834

1-7-04 For more on Berkeley's Bids for Solar Energy Systems, see SolarAccess: http://www.solaraccess.com/news/story?storyid=5839

1-6-04 Malaysia, RM100 Million Solar Project

The Ministry of Energy, Communications and Multimedia along with other stakeholders plan to commit RM100 million for a Building Integrated PhotoVoltaic (BIPV) project. Minister Datuk Amar Leo Moggie said the government would commit around RM20 million to the fund to match an expected contribution from the United Nations Development Programme-Global Environmental Facility. Pusat Tenaga Malaysia (PTM) is developing the project, which is expected to start by early 2005. Story through Solarbuzz http://www.solarbuzz.com/News/Newspage.asp and at: http://www.bernama.com/bernama/v3/news business.php?id=38470

1-6-04 BP Plans in Malaysia and Singapore

According to this article, BP Plc is pulling out of the petrol station business in Malaysia and Singapore and will sell 270 retail outlets in the 2 countries, saying it will refocus its resources on its chemicals, lubricants and solar power business in Malaysia. Story at: http://biz.yahoo.com/rm/040106/energy_malaysia_bp_sale_2.html
http://www.iii.co.uk/shares/?type=news&articleid=4835983&action=article

1-6-04 More on Large Solar Energy Project for Nevada

A 214.5 kW solar array is currently under construction in Henderson on the roof of the Andrew Lessman's Your Vitamins Inc. production facility. Las Vegas Solar Electric is the solar electrical subcontractor for TWC Construction. The system is made up of 75 W AstroPower solar modules applied to the PowerLight PowerGuard roofing system. When completed in mid-January, the installation will cover 23,000 square feet. Story at SolarAccess:

http://www.solaraccess.com/news/story?storyid=5826

Las Vegas Solar: http://www.vegassolar.com/

PowerLight: http://www.solaraccess.com/marketplace/compdetail?compid=531

1-6-04 NASA's Spirit Rover on Mars - Solar Powered

On each Mars Exploration Rover, the core structure is made of composite honeycomb material insulated with a high-tech material called aerogel. The deck is populated with three antennas, a camera mast and a panel of solar cells. Additional solar panels are connected by hinges to the edges of the triangle. The solar panels fold up to fit inside the lander for the trip to Mars, and deploy to form a total area of 1.3 square meters (14 square feet) of three-layer photovoltaic cells. Each layer is of different materials: gallium indium phosphorus, gallium arsenide and germanium. The array can produce nearly 900 watt-hours of energy per martian day, or sol. However, by the end of the 90-sol mission, the energy generating capability is reduced to about 600 watt-hours per sol because of accumulating dust and the change in season. The solar array repeatedly recharges two lithium-ion batteries inside the warm electronics box.

In another source: Power is provided by the solar arrays, generating up to 140 W of power. By the end of the 90-sol mission, the capability of the solar arrays to generate power will likely be reduced to about 50 watts of power due to anticipated dust coverage on the solar arrays (as seen on Sojourner/Mars Pathfinder), as well as the change in season. Mars will drift farther from the sun as it continues on its yearly elliptical orbit, and because of the distance, the sun will not shine as brightly onto the solar arrays. Additionally, Mars is tilted on its axis just like Earth is, giving Mars seasonal changes. Later in the mission, the seasonal changes at the landing site and the

lower position of the Sun in the sky at noon than in the beginning of the mission will mean less energy on the solar panels.

Composite Optics Inc. (COI), San Diego, Calif., built the lander structures and performed significant design and analysis for the project. In addition, COI manufactured the solar array substrates that provided power during the "cruise" stage to Mars and the solar array substrates mounted on the MER to provide power on the surface of Mars.

http://biz.yahoo.com/prnews/040106/cgtu016 1.html

Spirit Information and photos at:

http://marsrovers.jpl.nasa.gov/mission/spacecraft_rover_energy.html

http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=2003-027A

http://marsrovers.jpl.nasa.gov/home/

http://marsrovers.jpl.nasa.gov/mission/spacecraft_surface_rover.html

http://spaceflightnow.com/mars/mera/031231mer.html

1-6-04 Unmanned Aerial Vehicles (UAVs) - Thin Films (source: <u>January 5, 2004, Lights in Night Sky...</u>)

From the Daily Press: "Farther into the future is an unmanned airship. Not an airplane, SPS can maintain a relatively geostationary position at 70,000 feet. Call it Superblimp. According to its manufacturer, Lockheed Martin, 'Lift is provided by helium that is contained in its envelope. Differential thrust, electric-powered props control the pitch and roll and keep it in position. With the advent of thin-film photovoltaic solar cells (capable of producing voltage when exposed to radiant light), commercially available fuel cells and lightweight/high-strength fabrics, a high-altitude airship could stay on station weeks or even months at a time by generating its own power and keeping helium loss to a minimal amount."

1-5-04 Graham Owen's Response to L.A. Daily News

Graham Owen's response to the L.A. Daily News story on output of several solar electric systems at the Department of Water & Power can be found at: http://www.solarexpert.com/DailyNews-reply.html

L.A. Daily News story: http://tinyurl.com/3cmjo

1-5-04 MSK and Kaneka Semi-transparent Building-integrated Product

PV-TV is a new building material that transforms any glazed surface into a power station by day and a full-color screen by night. It is based on amorphous silicon solar technology developed by MSK Corporation with Kaneka Corporation and the Japanese architects Taiyo Industries. The panels have a 38 Wp rating. See article highlighted in the latest issue of NBuzz at Solarbuzz: http://www.solarbuzz.com/News/NewsASPT18.htm

Tittp://www.solarbuzz.com/News/News/Ci Tro.ii

MSK: http://www.msk.ne.jp/english/index.shtml

Kaneka: http://www.kaneka.co.jp/kaneka-e/index.html

1-5-04 Aquentium, Inc. Agreement for Manufacturing Facility

Aquentium, Inc., announced that the company has signed an agreement for office and manufacturing facilities in Palm Springs, California. Said Mark Taggatz, President, "With our recent acquisition of Charis Energy Development, Inc., we were seeking a location in California that would allow us manufacturing capabilities for our solar energy product". Story at: http://biz.yahoo.com/prnews/040105/lam052 1.html

1-5-04 New Jersey, Medical Center Solar Electric System

SolarWorks USA will install an 85-kW solar electric system on a South Jersey medical center, using 450 of Sharp's 140-W rectangular and 70-W triangular modules mounted on a hip roof.

Says Michael Gullo, SolarWorks USA COO, "Most people are unaware of the benefits of a solar energy system that can be obtained through the current net-metering program. The fact of the matter is that New Jersey has one of the best Renewable Energy programs in the country offering substantial incentives to consumers and businesses." Story at Solarbuzz:

http://www.solarbuzz.com/News/NewsNAPR316.htm

SolarWorks USA: http://www.solarworksusa.com/index2.htm

1-5-04 Green Power Requests for Proposals

To sign up to receive email notices of green power RFPs, go to: http://www.eere.energy.gov/greenpower/gp_rfps.shtml

1-5-04 Canadian Renewables

For updates from Bill Eggertson, Canadian Association for Renewable Energies, visit: http://www.renewables.ca/

1-2-04 Xcel Energy Renewable Development Fund RFP

Xcel Energy has issued its second request for proposals (RFP) for projects to fund. Funding is available for various sized projects in two categories:

- 1. Energy Production
- 2. Research and Development

The Fund schedule calls for grant applications to be submitted by March 16, 2004. Interested parties should submit a Notice of Intent to Bid prior to the grant application. Details at: http://tinyurl.com/yuvjv

1-2-04 Connecticut Clean Energy Fund RFP

The Connecticut Clean Energy Fund has issued a Photovoltaic Program RFP for solar PV installations on commercial, industrial, and institutional buildings. For details see:

1-2-04 Interstate Renewable Energy Council Newsletter

IREC's E-Newsletter #26 - 2003 Year in Review can be found at: http://www.irecusa.org/commout/enewsletter.html

1-2-04 CCEnergy Expansion

A solar-electric buyer's cooperative, CCEnergy, has established 9 California offices in the last couple years and intends to open more, possibly on the East Coast and in Ohio and Wisconsin says president and CEO Dan Pellegrini. Story through Solarbuzz at: http://www.busjrnl.com/story.html?story.id=3759

1-2-04 California, L.A. Department of Water and Power's Solar Output

Several of the Department of Water and Power's large-scale solar-energy projects appear to be generating less output than expected, and a review is underway. http://www.dailynews.com/Stories/0,1413,200~20954~1865437,00.html